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DISSERTATION / DOCTORAL THESIS

Titel der Dissertation / Title of the Doctoral Thesis

„Places and Party Preferences:
Contextual Effects on Political Behaviour in Austria“

verfasst von / submitted by

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angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of
Doktor der Philosophie (Dr. phil)

Wien, 2018 / Vienna 2018

Studienkennzahl lt. Studienblatt /
degree programme code as it appears on the student
record sheet:

A 796 310 300

Dissertationsgebiet lt. Studienblatt /
field of study as it appears on the student record sheet:

Politikwissenschaft

Betreut von / Supervisor:

Univ.-Prof. Mag. Dr. Sylvia Kritzinger

Danksagung

An dieser Stelle möchte mich bei all jenen bedanken, die mich beim Verfassen dieser Dissertation begleitet und unterstützt haben - und mich zugleich auch bei jenen entschuldigen, auf deren Nennung ich hier leider vergessen habe.

Univ. Prof. Sylvia Kritzinger möchte ich nicht nur für die Betreuung dieser Dissertation, sondern auch für ihre Geduld bei der Fertigstellung derselben danken. Weiters möchte ich mich auch für ihr langjähriges Vertrauen in meine Arbeit und mich, sowie für alles, was ich in all den Jahren von ihr lernen konnte bedanken. Weiters gilt mein Dank auch den Gutachtern der vorliegenden Arbeit.

Auch den tollen Kolleginnen und Kollegen der Österreichischen Nationalen Wahlstudie AUTNES möchte ich meinen Dank für viele anregende und interessante Diskussionen, Unterhaltungen und Projekte aussprechen. Den Kolleginnen und Kollegen vom ehemaligen Fakultätszentrum für Methoden der Sozialwissenschaften und der AUTNES Demand Side außerdem auch dafür, dass der Forschungsalltag mit ihnen nicht grau, sondern jeden Tag aufs Neue spannend war; und dass ich viele von ihnen auch heute noch zu meinen Freundinnen und Freunden zählen kann.

Zuletzt möchte ich mich auch bei meiner Familie bedanken; bei meinen Eltern und meiner Schwester für all die Unterstützung, die ich Zeit meines Lebens von ihnen erfahren durfte; bei M. dafür, dass sie nochmal eine Abschlussarbeit mit mir durchgestanden hat (das ist jetzt vorerst die letzte – versprochen!); und bei GJ für den wohl schönsten Grund, dass ein Arbeitsplan doch nicht eingehalten werden kann.

Diese Arbeit wurde unterstützt von der Österreichischen Nationalen Wahlstudie AUTNES, einem Nationalen Forschungsnetzwerk (NFN) des Fonds zur Förderung wissenschaftlicher Forschung (FWF) [S10902-G11].

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1. Introduction: Electoral Studies, Contextual Effects, and Place

Research in electoral and political behaviour deals in most cases with the influence of individual (predictor) variables on other individual (outcome) variables employing the paradigm of methodological individualism in political science (J. W. Books & Prysby, 1995; Staeheli, 2003). Common approaches in this field of political science are (among others) e.g. investigating the influence of *issue positions* on voting behaviour; how evaluations of *economic performance* influence support for governing and/or opposition parties, or whether and to what extent voting behaviour differs between different *sociodemographic groups* (only to name a few and very well-known classic theoretical approaches in the study of voting behaviour).

However, apart from some exceptions (see e.g. J. W. Books & Prysby, 1991; Cox, 1968; R. R. Huckfeldt & Sprague, 1995; Ron Johnston & Pattie, 2006; Ron J. Johnston & Pattie, 2005 only to name some seminal work and researchers) the influence of a person's *spatial context* on her political behaviour did not receive as much attention as these other approaches. In doing so, political science researchers run into danger of missing some important point: Voters (and people in general) live at different places. The experiences they make and the information they receive are based on the spatial context in which they live; thus, every experience can be regarded as a *contextual experience* that is dependent on the (spatial) context of perception. This also applies to politics and political behaviour; *all politics is local*, people are saying.¹

Voters react to those with whom they frequently interact, or they react to what they hear, see, and experience in everyday life. Or put into more general words: Their spatial context influences them, besides other factors, regarding their social and political behaviour. Of course, individual determinants of political behaviour are still important (and will in most cases account for the lion's share of variation in political behaviour). However, contextual influence on individual behaviour should also be considered in political science research to see the bigger picture of electoral behaviour more clearly.

¹ How and through which channels voters (and, again, people in general) are influenced by their context will be discussed in section 2. For now, let us just note that there are different ways and channels of contextual influence.

This, however, is also the aim of this study: Investigating the influence of spatial context on political behaviour and answering the main research question *which impact has the local context on voters' individual preferences for parties?* Or put into other words; how do the contextual experiences that voters continuously make in their everyday life shape their political preferences? By doing so, this study not only takes the saying that “all politics is local” into account but also makes political science research at least more local than it usually is. Before I describe the research question and research design in detail (see section 1.4 and section 4 on the research question and research design, respectively), the phrase and concept of *context* must be elaborated further.

As J. W. Books and Prysby (1991) state, one has to be very careful and specific when talking about *context* since this term can have very different meanings: We could think of households, families, and friendship networks as *one* possible kind of context that is likely to influence individual social behaviour. However, *context* can also include larger groups and quasi-group such as social classes, organisations, interest groups and many other kinds of social groups that could all also be summarised under the label of *context*.

Nevertheless, these *contexts* (or better: these social groups and organisations) will not be addressed in this study. Furthermore, I will adopt the definition of context by J. W. Books and Prysby (1991: 2) who areally define context as a “geographically bounded social unit” – or as a geographer would put it: Context is *place* and *place* is context. Hence, the main research focus of this study lies on *contextual effects* resulting from *geographic location* and accompanying spatial processes.

In case *context* is defined as an individual's location within a geographic setting (e.g. a specific region in a country, a specific quarter in a city, or specific countries in cross-national studies), *contextual influence* can also be regarded as the influence of geographic *place* on human behaviour. Of course, it is not *place* per se or with regards to the physical location that influences people's behaviour: Assuming that e.g. some place's physiographic environmental conditions such as rainfall, hours of sunlight, or humidity influences a person's political views and social behaviour would be quite controversial.² It is rather the *condition of place* and its *composition*

² However, the impact of environmental factors, especially rainfall, on electoral turnout is investigated comparatively thorough, but comes to mixed findings (see e.g. Gomez, Hansford, & Krause, 2007; Persson, Sundell, & Öhrvall, 2014).

regarding various social and economic factors that exerts contextual influence on voters. Therefore, *contextual influence* as it is defined and used in this study can be regarded as the mediate *influence of geographic place* on a person's political behaviour. However, by considering that *context* (that is the geographic *place*) also influences political behaviour, we also allow for spatially contingent experiences that voters make at the various *places* at which they reside.

We know for a fact that geographic *places* are not the same across space; actually, *places* can be highly diverse and very different from each other regarding their *place* specific composition of inhabitants, the state of the (local and regional) economy, the information that is shared with others, and nearly every other social (or physical geographic) phenomena we can think of.³ Consequently, depending on where a person lives, she might be confronted with very different social and economic conditions. Investigating the impact related to these variations between different *places* on political behaviour, especially voting behaviour, is carried out in electoral research using approaches known as *electoral geography* or sometimes *political ecology* (see Falter & Winkler, 2005).

However, since social sciences ignored *place* for the longest period of its existence and still address *place* and *place* specific issues comparatively seldom (see e.g. Läßle, 1992 for a discussion of the absence of *place* and other physical and material factors and phenomena in sociology), a short discussion of a social-scientific conceptualisation of *place* seems to be a good (and also necessary) starting point of this investigation of *place* specific political behaviour and contextual influence. This will not only help us to acquire a better understanding of *place* per se, but also in understanding how and why *place* might shape our political behaviour and political attitudes.

1.1. Place: Locales, Location, and Senses of Place

Even though everyone can imagine what *place* and *space* could mean in everyday life and regularly uses these terms, *place* and *space* can be (and had been) defined and conceptualised in very different ways in the social sciences but also in geography (see

³ One could think of e.g. the extent of social inequality in a geographically bounded unit, religious groups settling in specific places, or even spatially varying density of pubs. In fact, almost everything can be regarded as varying from place to place; it only depends on the analytical scale used for observation and the precision of measurement.

Staeheli, 2003; see also Weichhart, 2008 for an overview of the use and definitions of *place* in social geography and human geography). However, one must be very precise and specific when terms from every day's language are used in (social-) scientific studies. This, of course, also applies to *space*, *place*, *region*... and the different meanings of these terms. So, a conceptualisation and definition of *place* is essential in a study that deals with *place* specific influence and the impact of *spatial context* on individual behaviour. The definition of *place*, however, should be appropriate for the investigation of *contextual effects* and should also be logically linked (or at least linkable) to political behaviour.

The conceptualisation of *place* used in this study is the conceptualisation of *place as context* (Staeheli, 2003) which entails a threefold understanding of place as it is described by Agnew (1987) or Cresswell (2009).⁴ In short, the conception of *place* employed by Agnew and Cresswell defines *place* as a composition of three different components that capture at large all characteristics of *place*. These three components of *place* are *locale*, *location*, and *senses of place* (Agnew, 1987; Cresswell, 2009).

Locales describe the geographic places in which social interactions and relationships with others take place; “[l]ocale refers to the material setting for social relations” (Cresswell, 2009: 169) or “the settings in which social relations are constituted [...]”(Agnew, 1987: 28). Hence, *locales* are the geographic *places* or the stages of planned interactions as well as of unintended interactions with others; or, as Giddens describes it, they are *places* where routines of different people overlap each other and institutionalised contact between people happens (Giddens, 1992: 170f).

Location addresses the fact that geographic *places* (and, consequently, also *locales* as the stages for everyday interaction) are also influenced by higher-level social and economic processes (Agnew, 1987). Put into other words, *location* can be seen as the address of *locales* and geographic *places* within a network of other *locales* and *places*; it refers to the “where of place” (Cresswell, 2009: 169) in e.g. the grid of a geographic information system.⁵

⁴ Essentials of a definition of *place as context* can also be found with a slightly different meaning in Giddens' (1992) theory of structuration using the label of *locales* instead *place* or *context*.

⁵ You could also think of *locales* as the knots of a spider's web. *Location*, then, refers to the fact that each knot has an own position that no other knot in the same web can have. All knots, however, will be more or less affected in case a fly gets trapped in the web – depending on where the fly actually gets caught. But every knot is related to every other knot in this web.

For instance, a *locale* can be affected both by macro-economic processes (such as region specific economic developments which depend on the typical economic branches in this region and corresponding demand in these branches) and macro-social processes (such as processes of selective migration that are maybe also linked to macro-economic processes). The impacts of these macro-processes should be regarded as place specific in their results and intensity – depending on their *location* and where they happen.

The third component of *place* is the so-called *sense of place* that describes specific meanings, feelings, and emotional reactions that are associated with *places*. *Senses of place* can be gained individually or collectively and either through individual experience or through mediated experiences of others or the media (Cresswell, 2009). *Senses of place* can be seen as the typical meaning or the picture of a specific place that inhabitants of this place or others usually associate with it: You do not necessarily have to have visited or lived in Paris (or New York, or Vienna... or any other region or city) to have feelings for or a meaning of it – you can also have a picture of Paris that is solely based on media coverage or the experiences of others (or even fiction). However, *senses of place* can also produce a region specific identity of the inhabitants of this *place* (Agnew, 1987). Therefore, you do not only live in Paris, you also feel and behave in a specific way because of this regional identity that is associated with the place's history, traditions, and a *place* specific state of mind.

1.2. Place is Context: The Spatial Context

To sum up, the threefold conceptualisation of *place* as it is described by e.g. Agnew and Cresswell is hierarchically structured to some extent: On the bottom, there are *locales*, the sites of social life, in which social interaction happens and *place* is experienced. These *locales* are embedded in *locations* that address the where of *place* and the interrelations of these *places* with other *places*. *Locales* and *locations* produce *senses of place*; place specific behaviour, views, and experiences that, in consequence, shape people's behaviour and social action. And, of course, also partly their political behaviour; even though most likely to a much smaller extent than individual characteristics and attitudes do. These components of *place* taken together can be regarded as the *spatial context* of individuals that influences their behaviour in various ways:

First, the experiences they make for themselves and *without any interaction* with others are also based on the *spatial context* in which they are located; things people see and hear, things they witness and undergo, everything can be accounted for by *place* specific constellations and compositions.

Second, they also interact with others in *locales* which are embedded in *locations* with unique dynamics of social and economic macro-processes. But interaction does not happen without any further consequences for the agents involved; “[p]eople are inherently social. From fashion choices to moral standards, people continually adjust their behavior to fit in with those who surround them” (Sinclair, 2012: xi); and “[a]s persons we react to the expectations and behavior of others. In fact, we often define ourselves in these terms” (J. W. Books & Prysby, 1991: 2).

Thus, people’s behaviour, and hence their political behaviour as well, is influenced by the interactions within and experiences resulting from these *locales*, by the *locations* in which the *locales* are embedded, and by the *senses of place* that result from these embedding and *place* specific history.

To make things easier in this study, this threefold conceptualisation of place consisting of these three components shall be summarised as *context*. The place specific impact (of *locale*, *location*, and *sense of place*) on individual behaviour, therefore, will be labelled as *contextual influence*.⁶ But we always keep in mind that this *contextual influence* still results from the sites and stages of everyday life, from the influence of other *places* that is determined by the address of this place, and from the *place* specific state of mind – *locales*, *location*, and *senses of place*.

1.3. What is Context?

Contextual analysis in general can be defined as “[...] the study of the role of the group context on actions and attitudes of individuals.” (Iversen, 1991: 3); thus, it focuses on macro-level influence on micro-level outcomes. As outlined above, this study does not deal with contextual effects resulting from social groups (such as families, social classes, unions...etc.). Instead, its focus is on *contextual effects* resulting from voters’ shared characteristic of place and location within space. The argument goes that voters in the same location, that is the same context, share certain perceptions and experiences. Consequently, they are similarly influenced in their

⁶ However, we keep in mind that *place is context* and *context is place*, as already stated above.

political decision making by this shared characteristic of the same spatial composition of economic and social phenomena (Marsh, 2002).

In the beginning and middle of the 20th century, Rudolf Heberle was among the first who investigated *contextual effects* of *place* on voting behaviour using the socioeconomic composition of the inhabitants and the economic characteristics of *places* as influencing factors on voting. Heberle studied how this place specific characteristics influence individual voting behaviour and, by doing so, linked *place* and vote choice in his studies (Falter & Winkler, 2005). These studies are often seen as the first research in political ecology or research on the influence of geographic context and *contextual effects*.

Another classic application of *contextual analysis* in geographic terms is the investigation of the impact of *place* (or to be more specific the impact of location) on voting behaviour that had been studied by Lipset and Rokkan (1967). In this study, context is regarded as the centre-periphery cleavage in Western European politics that influences voting behaviour as well as the formation of Western European party systems. Knutsen (2009, 2010) also focuses on the impact of region and location on political behaviour and party choice and comes to the conclusion that regional location still influences political behaviour in Western European democracies. However, in other more recent studies of *contextual effects* context had been investigated and conceptualised in very different ways. These various definitions of context can address very different things and social phenomena.

For instance, R. R. Huckfeldt and Sprague (1995) (and others) define *contextual effects* as any effect that arises due to social interaction with the environment.⁷ This definition of *contextual effects* constrains contextual influence to influence arising solely through social interaction with others (that is in most cases, and also in the South Bend study by Huckfeldt and Sprague, limited by space). Even though this approach might be useful sometimes (and it was very useful for Huckfeldt's and Sprague's numerous studies using the data carried out in South Bend, Indiana), it also ignores *contextual influence* that might not be transmitted through interaction with others but using other channels of transmission.

⁷ This definition of context as influence arising from friendship relations or "peer networks" is also used by Sinclair (2012) in a similar way.

Of course, it depends on what shall be investigated and which contextual factor is the focus of the study if such a definition is appropriate or useful. However, by constraining *contextual influence* to influence through interaction, many interesting and spatially diverse factors are ignored and cannot be investigated in the first place, e.g. the state of the regional and local economy and its influence on individual political behaviour.⁸ Furthermore, Curtice (1995) presents evidence that conversation with others is not a suitable transmitter of *contextual influence* by showing that *contextual influence* can be observed even in cases when no political talk with others exists. Therefore, a broader definition of *contextual influence* including more sources of contextual impact might be better suited than the definition of *contextual effect* as solely social network exposure.

In contrast to Huckfeldt and Sprague, Burbank (1995a) has a broader definition of context and *contextual effects* and defines them as systematic variations in individual behaviour that results from variations across geographic places. Because of these place specific contexts, similar people behave differently per the context in which they live. While Huckfeldt and Sprague point out the relevance of interaction with others in the analysis of *contextual effects* and, thus, see social interaction as the most important (if not the only source) of *contextual influence*, Burbank ignores the source of the effect (whether it results from social interaction, individual perception...etc.) and offers a more widespread definition that includes *any* environmental effect.

The same applies to Books and Prysby's (1991) definition of local context on which this study is based. According to Books and Prysby, *contextual effects* refer to the impact of characteristics of the local context which is areally defined as geographically bounded units (J. W. Books & Prysby, 1991: 2f). Thus, contextual influence can include effects from informal interaction, individual perception, organisationally based interaction, and mass media that arise within geographically bounded units and which influence individual behaviour (see J. W. Books & Prysby, 1991: 54). Similar to Burbank (1995b), they do not differentiate between different sources of *contextual impact* and spatially varying factors are regarded as responsible for *contextual influence*, regardless of how they are actually transmitted to others (on the modes of transmission see section 2.1).

⁸ Even though what people *talk about* the state of the economy with others could be taken into account using this definition of context. However, talk can be dramatically different than the actual state of the object people talk about.

This broader definition of context and *contextual influence* includes a wide range of possible place specific impact that might also affect higher-level social phenomena: Politics as well as society in general are experienced locally, the consequences resulting from these experiences, however, can manifest themselves on national or even higher levels (van Deth & Tausendpfund, 2013). The attitudes formed by and experiences made through the local context – the *place* – consequently also influence political attitudes and political behaviour on higher scales – *All politics is local*.

However, in this chapter's next and final section the research question(s) of this study will be finally stated. This is then followed by an explanation of this study's theoretical foundations as well as an explanation of methods and data used in this study.

1.4. Research Question and Aim of this Study

The main advantage of research in political and electoral behaviour that allows for *contextual influence* is that voters are studied within their geographic setting instead of being conceptualised as atomised individuals or as being completely independent from their place specific social environment, social structure and macro-economic processes (J. W. Books & Prysby, 1991). This is especially true for comparative electoral studies (see Marsh, 2002), but also applies to the nation and its different regional or local contexts.

People are always members of collectives and located in place; no matter whether we take their country, the region within a country, or the municipality within a region into account. However, “[c]ontextual effects arise when the probability of a political preference, choice, or behavior varies as a function of an individual’s location in social, political, or geographical space” (R. R. Huckfeldt & Mendez, 2008: 84). Through *contextual analyses*, the aggregate effects of the characteristics of these collectives on the behaviour of their members can also be taken into account. Consequently, the influence of place specific characteristics on voting behaviour can also be studied in such analyses (R. R. Huckfeldt & Sprague, 1995).

The main research question of this doctoral thesis in which *contextual effects* on voting behaviour will be analysed is *which impact has the local context on voters’ individual preference for parties?* This research question will be answered by dividing it into different sub-research questions that are tailored to the different

analyses and components of spatial context in order to provide a broader view on spatial context and its components (see chapter 5, chapter 6, and chapter 7). It is assumed that places are different from each other regarding the performance of the economy, the people that are living at different places, and the news media regarding its popularity and its reporting. However, the question is how these types of spatial context – the economic context, the social context, and the media context – influence political behaviour. By doing so and by investigating different kinds of spatial context and spatially varying parts of the social and economic reality, a broader understanding of *contextual effects* will be obtained.

Even though we already know some aspects of *contextual influence*, there are some important points where our knowledge is still limited. Therefore, another novelty of this project is to reach beyond existing findings of *contextual analysis* on electoral behaviour and to also answer the sub-research question of *how the impact of local context varies by the level of the analysis?*

One can assume that *contextual effects* influence voting behaviour differently depending on which level the analyses are carried out. Some contextual variables might impact individual behaviour only on lower levels (e.g. the political district, the neighbourhood or the municipality and its surroundings) while others might affect voting behaviour only (or more/less strongly) on higher levels (e.g. the region). This variation can, of course, result from different processes of transmission of contextual influence.

For instance, if we would assume that social interaction is important for *contextual influence* of local unemployment, then lower levels will be more important for the analysis since social interaction most often occurs within the borders of political districts. However, if we assume that mass media is more important than social interaction for the transmission of this influence, we would have to move up one level since mass media coverage is more diversified on the higher level between different regions than on the lower level between different political districts (see J. W. Books & Prysby, 1991; on transmission of contextual influence see below).

Another new perspective on contextual influence in this doctoral thesis and another sub-research question that will help to gain deeper insights into *contextual influence* is the question *how the influence of local context varies by individual characteristics?* As contextual influence on voting behaviour might vary by the levels

of the analysis, it might also vary by individual characteristics since it would be very unlikely that every individual is affected by context in the same way and in the same extend. For instance, the impact of the local context might be larger for voters with low levels of political knowledge since these people are more likely to gain information from their social environment and to be affected by impersonal influence (D. C. Mutz, 1992).

On the other hand, Orbell (1970) found out that *contextual influence* is largest for people with a moderate level of political involvement. His reason for that is that people with high political involvement do not react to *contextual influence* while people with low levels of political involvement do not receive the necessary cues from their context that could influence them in the first place. Consequently, people with low levels of political involvement do not react to the local context (because they do not have the chance to, basically). So, we see that the argument can go both ways and that individual characteristics might moderate the influence of contextual variables.

Summing up, findings on intervening variables of *contextual influence* are quite scattered. Further investigation of the role of individual variables in *contextual influence* as well as investigation of the scale on which *contextual influence* operates is needed and will help us to gain more insights on *contextual influence* on voting behaviour. Besides the analysis of *contextual influence* on voting behaviour in general, these are the main goals of this doctoral thesis.

So, after this study's research question(s) and understanding of *place* have been described, it is time to turn to the fundamental questions of this thesis that need to be answered before we turn to the actual investigation of *contextual influence*: How does *contextual influence* work? How can we study *contextual influence*? And, finally, where can we study *contextual influence* (given that place is context and context is place)? This will be done in the following chapters.

2. Theoretical Foundations of Contextual Effects

Before the modes of transmission of contextual influence will be discussed in this chapter, some words about the different kinds of context are needed at this point. As already stated above, different kinds of contextual effects will be analysed in this study. These contextual effects are, of course, also related to different kinds of contexts, that is different parts of the social and economic reality that vary by place.

When thinking about contextual effects on voting behaviour many kinds of context (in terms of various social and economic phenomena that are mediated by place) might come into one's mind. The first is the *social context*, namely the social environment of one's geographic place: Which people live in the same neighbourhood, municipality, or region? Where do they come from? If they come from abroad, how do they express their home country's culture, if they do so at all? What and in which branches do people living in the same context work, and how well off are these people? What kinds of organisations can be found in this local environment? All of these factors might influence a voter's behaviour and also the information she receives from her neighbours and people living in the same context (see below), since the local social environment is the place of most citizens' everyday life and the place of social integration (van Deth & Tausendpfund, 2013).

The second kind of context that might be relevant for a voter's decision at the ballot box and her preferences for different political parties is the *economic context*: How well is the local economy performing? How many people are unemployed? Is business declining or booming? How is or was one's region or municipality affected by the financial crisis? These factors are very likely to influence one's voting behaviour as well, especially when theories of economic voting or performance voting are taken into account (see e.g. Lewis-Beck & Paldam, 2000 for an introduction) and when we keep in mind that the local economic environment directly affects the municipalities and their financial resources (van Deth & Tausendpfund, 2013).

Furthermore, it is not even necessary that voters take the state of the local economy explicitly into account; they might also base their evaluation of the *national* economy on their *local* experience and observation of economic performance. Consequently, voters living in areas with a high unemployment rate are more likely to think that the national economy is also doing badly, while voters in affluent areas might overestimate national economic performance (J. W. Books & Prysby, 1995).

Also, and as a third context, one might think about *effects of the mass media*: What are people usually reading in their local newspapers and what are they watching in the local television programme? Which national newspapers are dominant in these areas, what do they report, and how do they report and frame their stories? Do people usually read more than one paper or is only one newspaper especially dominant within a certain region? Thus, the contextual biased and place specific information that is transmitted through the mass media (that is the *media context*) is also another relevant source of contextual influence.

We see that there are various sources of contextual influence including (but maybe not limited to) *social contextual* influence, influence from the *economic context*, and local *mass media contextual effects*.⁹ These are the types of contextual impact that I am going to investigate in this study. However, after this denotation of different contexts, the logically following question is: How can these contexts affect individual behaviour? And, more importantly, how do voters “receive the treatment” (Newman, Velez, Hartman, & Bankert, 2013) of contextual variation? As Dunleavy (1979) once famously stated, “[w]e cannot simply assume that political alignment brushes off on people by rubbing shoulders in the street” (Dunleavy, 1979: 413).

So, another explanation for contextual influence is needed. To answer the question how voters ‘receive the contextual treatment’; I want to illustrate the psychological processes that transfer contextual influence on the individual. Afterwards, I will present the model of contextual influence on party preferences that is applied in this study.

2.1. A Theory of Contextual Effects

According to micro-sociological approaches in research on voting behaviour, voters do not develop their political attitudes solely in isolation but also through and because of interaction with others. Thus, political attitudes can (and might) be transferred to others, reproduce themselves and finally become dominant in places where a majority of people holds similar political attitudes (Schoen, 2005). Consequently, voting decisions in such areas might be also (at least partly) influenced by the social context (Schoen, 2005; van Deth & Tausendpfund, 2013).

⁹ J. W. Books and Prysby (1991) also name institutionally based interaction as fourth and final component of context, however, this component will not be analysed in this thesis.

Apart from this ‘classic’ approach of investigating electoral behaviour established by the Columbia School, voting has most often been defined as an individual act that is also performed by individuals in other theoretical frameworks: In short, it is often theorised that atomised individuals decide in complete isolation from their social environment for which candidate or party they should vote for, or if they go to the polls at all. This conceptualisation of isolated voters can be found in the social-psychological approach of the Michigan School as well as in the rational choice approaches associated with the Rochester School.

Since these approaches in the investigation of electoral behaviour received a lot of attention and influenced the way in which electoral studies are performed nowadays – usually as nationwide random samples of eligible citizens – the influence of the social context on voting somehow lost its attraction for most researchers. Conclusively, the so-called ‘social logic of politics’ (Zuckerman, 2005, 2007) which claims that “[p]eople develop their political preferences, knowledge, values, perceptions of ability, and decisions about political behavior in interaction with others, [...]” (Zuckerman, 2007: 635) did not receive any more attention and the research focus shifted to behavioural approaches in the study of political behaviour.

However, behavioural approaches will not help us very much in the investigation of contextual influence on voting. In order to investigate the impact of context on voting behaviour, it is highly reasonable to turn back and pay more attention to the social logic of politics and the Columbia School’s sociological approach of investigating electoral behaviour.

According to the social logic of politics, learning is a central point in explaining contextual influence on political behaviour (Zuckerman, 2007). In a distinction of different learning processes, learning can either be defined as an instrumental choice or as a social process: In case learning is instrumental, the learning process must be defined as a hierarchical relationship in which voters aim to achieve a defined goal; to learn something from someone else who knows something special or who knows at least more than themselves. Conversely, in case learning is defined as a purely social process happening during every day social interaction, learning is mutual and everybody is influenced by those with whom social interaction takes place frequently.

Either way, it can be stated that people learn from each other about politics and that voters are likely to use the results of these learning processes to make up their minds

when it comes to elections: They are influenced in their vote choices by the information they receive from their context prior to election. This information might be transmitted through interaction with others or it might be received through personal experience. Conclusively, and according to the social logic of politics, voting has to be defined as a social action in the terms of Max Weber (Zuckerman, 2007) since the meaning of this (social) action is related to and oriented towards other voters' behaviour (Amann, 1987).

However, social action cannot be performed by atomised individuals and in complete solitude. The results (from the perspective of the receiver) or the content (from the perspective of the sender) of learning processes is information that is shared within a spatial context and, thus, this shared information and the included cues about politics are often understood as the key in the understanding of social contextual influence (J. W. Books & Prysby, 1991; 1987; R. R. Huckfeldt & Sprague, 1995; Putnam, 1966).¹⁰ Because this theoretical explanation is rather straightforward – people are influenced by other people they like and with whom they interact – it is not surprising that theories on social interaction had often been considered and used as explanations of contextual effects (e.g. R. R. Huckfeldt & Sprague, 1995). People are social beings that talk and interact with each other; and the statement that “[p]eople who talk together vote together” (Pattie & Johnston, 2000) seems like a handy explanation of contextual influence. However, there are also some questions and theoretical pitfalls accompanying this mode of transmission.

First of all, one could ask whether everybody would be influenced in the same way by her local context or if there are differences in the opinion formation process as it had been described in the classic work on “Voting” by Berelson, Lazarsfeld, and McPhee (1954)? Second, another assumption of this theoretical approach is that people select their contacts randomly from their social environment and, consequently, that their social interactions are an accurate reflection of their social environment. Thinking about our own experiences in school, at work, or in childhood games with children from the neighbourhood, this seems like a quite strong assumption if not unlikely or at least questionable (J. W. Books & Prysby, 1991). Social interaction might be a plausible, important, and necessary mode of transmission of contextual influence;

¹⁰ Alternatively, another driving force behind social contextual influence besides information could also be social pressure from a person's family, friends, neighbours, co-workers or in short: from their social network in which regular interaction takes place (Sinclair, 2012).

however, it might also be not the only one. So, of course, there might also be other driving forces that we can think of behind contextual influence.

Another string of theory tries to explain contextual effects through reference group behaviour and pressures to conformity (Rhodebeck, 1995; Sinclair, 2012), while others use information flow theory to explain the transmission of contextual effects to others (e.g. J. W. Books & Prysby, 1991; Burbank, 1995a; Orbell, 1970). As often in social sciences, different stories are used to report the same tale; and each of them has its own advantages but also shortcomings.

Turning to contextual influence that arises from identification with the social environment and conformity with the majority group, we see that this approach also has problematic assumptions and implications. As it had been described in the literature, a reference group serves two purposes: First, a reference group can establish and transfer norms to others who identify themselves with this group. Opposing views to the group's values and norms are then likely to be sanctioned by the majority group and its members (Schoen, 2005). Thus, adoption of group norms by the individual can result from identification with the reference group.

Second, a reference group also serves the evaluation of one's own situation compared to this group (Rhodebeck, 1995). The likelihood for reference group influence is larger when individuals interact frequently with group members and when individuals trust these group members (Schoen, 2005). Additionally, closeness to the group in geographic terms makes identification with this group also more likely (Rhodebeck, 1995).

Ever since the well-known experiments carried out by Solomon Asch, social scientists are aware of the power that group influence and the urge to conform can have on social behaviour (see Asch, 1955, 1956). In this famous study, Asch investigates the influence of group pressure on an individual's opinion. Asch invited participants to an experiment on visual judgement, however, only one participant was really a proband of this experiment while the other 'participants' were in fact affiliated with the study.

First, a single black line was presented to the participants. Then, they had to choose the line with the same length out of a set of another three black lines. However, the 'participants' affiliated with the study gave obviously wrong answers and, by doing so, influenced the real proband of this experiment in her answer and judgement: In

roughly one third of the trials, the probands reported an obviously wrong answer because of the group's opposing view on the correct line that they reported just before the proband. Thus, Asch shows that the size of the group with an opposing judgement as well as absence of support for the experiment's proband markedly increased her likelihood to accept the wrong judgement.

This urge to conform, meaning to adjust one's own opinion and judgement towards the majority, might also apply to political and voting behaviour. This might be especially true in case the social environment is dominated by certain political preferences or opinions without or with only few deviating points of view in the network, or when so-called 'strong ties' (e.g. close friends or family) represent opposing views to one's own political opinion and political attitudes. Analysis of panel data over the time of the 2008 presidential campaign in the U.S. shows that respondents' views tend to shift towards those of their social network when they are confronted with views and opinions that disagree with their own (Sinclair, 2012).¹¹

Empirical findings are mixed regarding the question which relationships (in terms of weak-ties or strong-ties, acquaintances or close friends and family) are important for processes of social pressure. Some findings are in favour of relationships between weak-ties, meaning that researchers found out that these relationships have a greater impact regarding the social context than close relationships between strong-ties (R. R. Huckfeldt & Sprague, 1991, 1995; Levine, 2005). Conversely, other findings suggest that strong-ties between voters are the relevant contacts for social pressure effects (Sinclair, 2012).¹²

This approach, however, could be one way to explain social contextual influence and well-known neighbourhood effects of voting: A lonely worker living in a white collar suburb might be pushed towards voting for the conservative party since all her neighbours, the parents of her children's friends, church members...etc. vote for the Conservatives. Consequently, she does not want to be in opposition to these people and their political views and, then, casts her ballot for a party that does not support her interests.

¹¹ Other research about contextual influence on turnout shows that people who experience these so-called 'cross-pressures' might rather stay at home at election day than people who do not experience dissent with their social environment (D. Mutz, 2002, 2006).

¹² In a different reading, greater impact of weak ties as reported in some research could also be interpreted as evidence that the driving force behind social contextual influence is rather biased information (see above) than social pressure.

However, the implications of reference group theory for contextual effects are somewhat unclear and partly troublesome (J. W. Books & Prysby, 1991). For instance, it is unclear in which direction one would be pulled if the local partisan context or political attitudes within the local context are equally divided? Another pitfall addresses individual differences in the adoption of group norms and the question whether this urge to conform applies to *every* individual in the *same* way (ibid.)?

In order to get a better insight on the processes of contextual influence, Putnam (1966) systematically tested theories on contextual influence. In his work, he considered social interaction, conformity, and party activity as possible reasons of contextual influence. Putnam concludes that (at least in his research design) social interaction theory suits best to explain contextual influence while explanations based on pressure to conformity and party activity are not supported by the findings.

However, social interaction theory might work best for explanations of influence of the social context (that is contextual variation of social phenomena such as different groups of workers, patterns of migration, or age structure) while influence of the economic context and effects of mass media – the other two kinds of context investigated in this study – can hardly be explained using this approach. Thus, another theoretical approach is needed for a more reasonable explanation of contextual influence in general, taking more than one kind of contextual influence into account. According to Books and Prysby this can be found in the ‘information flow’ approach first used by Converse (1962) and Orbell (1970). This approach had then been further specified by J. W. Books and Prysby (1991) and also Burbank (1995a, 1995b, 1997).

2.2. Information Flow and Information Processing

Combining theories on information flow with information processing theories offers a persuasive explanation of how people obtain information from their local context and how this information then changes their future processing of new incoming information. This, in consequence, influences their political and voting behaviour as well (see Burbank, 1995a for a detailed discussion of information flow theory).

In this theoretical framework, it is stated that people receive politically relevant information from their contextual environment through various sources: First, the information can originate from personal influence, namely direct interactions with

others (R. R. Huckfeldt & Sprague, 1995) as it is also stated in theories on contextual influence that are based on social interaction with others. Second, the information one receives can also originate from personal observations of the environment (Burbank, 1997; 1982, 1983) or from organisationally based interaction with unions, churches, and other kinds of associations offering information. Last but not least, one receives, of course, also information from the mass media (see also J. W. Books & Prysby, 1991).

This information is, however, in most cases biased because of the local environment (and its place specific characteristics) that provides it – or in short: its context. Depending on where a voter lives, she will receive differently shaped information because she hears and sees different things as well. Additionally, mass media might also report different stories depending on the context, while popularity of mass media outlets is also dependent on place. This spatially varying information also includes different cues and meanings of politics that are not the same across different contexts (Burbank, 1995a).

This information is then used by the receiver to organise new information flows in the future, and to process the new information without putting too much effort in it. In order to do so, people organise old information in cognitive constructs (a so-called ‘*schema*’) to evaluate new incoming information.¹³ By using these schemas frequently, the schemas that are often used become even more accessible. In consequence, they are more likely to be activated in future acts of information processing (see also Axelrod, 1973; Burbank, 1995a, 1995b).

Summing up, the theory on information flow and information processing presented by Burbank or Books and Prysby (and others) is well suited to explain how information becomes more accessible and, therefore, more likely to be used by the receivers. Once a *schema is used often*, it is going to be used *even more often* in the future. In case this schema is structurally biased, this biased information reproduces itself and influences the processing of new incoming information.

Consequently, voters have locally biased information at hand, including information received by others through informal interaction or received through personal observation and the mass media (the transmitters of contextual impact). This available information then influences people’s vote choices and other forms of

¹³ One could think of these schemas also as a special type of heuristics or shortcuts.

political behaviour (such as the preference for political parties investigated in this study but also e.g. vote choice) and thereby, political behaviour is at least partly determined by the local context.

As already sketched out in the description of information flow theory, there is a lot of information from different sources available for voters, such as information from *personal observation*, information provided by the *media* or *organisations*, and information provided by others in acts of *informal interaction* (J. W. Books & Prysby, 1991; Burbank, 1995a, 1995b). Voters may gain information about candidates, parties, and elections also from very different sources; e.g. they can read or watch the news, they might see campaign posters on the streets, they could follow TV debates and visit party websites, or they may even be approached in person by campaign workers on the streets. However, none of these ways to gather information is attached without any costs, they all cost at least time and sometimes even money.

In contrast, information gained in informal interaction through a social network is a rather cheap way to get informed about political events and political actors: Using the information provided by their social network, voters are able to learn about politics by simply aggregating the information from those around them such as family, friends, neighbours...etc. (R. R. Huckfeldt & Sprague, 1995; Lupia & McCubbins, 1998; Sinclair, 2012; Zuckerman, 2007). This way to get informed about politics is much cheaper than those described above since voters can gather information from people with whom they already have a relationship, from people who have their trust, and from those with whom they interact on a regular basis. By doing so, voters learn about politics bit by bit; they “obtain the information in a serial, cumulative fashion as a collection of responses, unsolicited opinions, offhand comments, and occasional heated arguments. In short, the process of social communication regarding politics constitutes a virtually endless series of discrete encounters between individuals and the associates with whom they share a social space” (R. R. Huckfeldt, P. E. Johnson, & J. Sprague, 2005: 30). They get informed about politics *en passant* during the course of casual conversation with others and political information is passed on within a social network (Sinclair, 2012).

But this cheap way of gaining information (or put in other words: of learning about politics) still comes with a price: The political knowledge these voters have is based on the information passed on to them and therefore, it is constrained by their social

network and its characteristics. Depending on the composition of conversation partners within a social network, a voter will receive different kinds of information that include different cues. However, voters still use this information provided by others to make sense out of politics and to create a meaningful picture of reality (R. R. Huckfeldt et al., 2005; Lupia & McCubbins, 1998). Their decision in the polling booth will also be influenced by this information provided by others and voting becomes a Weberian social act. The same, however, might be also true for party evaluations and preferences towards parties in general.

Similar can be said regarding the other ways of transmission of contextual effects: Voters gather information from their own observations or the media environment every day bit by bit. However, the things they observe, experience, or that the mass media reports are biased because of their location; or in other words: because of the context in which they reside. Nevertheless, this information will then also be considered when it comes to politics and party evaluations; they will think about the things they saw (at their context), they might remember the things they heard (at their context), they might recall the newspaper article they read (and that had been provided at their context). So, contextual bias, and thus contextual influence, operates regardless of the specific mode of transmission. Even though the information that is considered at the ballot box is biased in one way or the other, this way of information gathering is still cheaper than other alternatives that cost money and time and, thus, the former might be more attractive to some voters than the latter.

2.3. A Model of Contextual Influence

By using the information flow and information processing approach in the explanation of contextual effects, we are now able to take all possible sources of information into account: Personal observation, informal interaction, organisationally based interaction, and mass media can be investigated at the same time and using the same underlying theoretical model. Thus, we can conclude that “[c]ontextual effects occur when some aspect of the community in which a person lives systematically alters the flow and meaning of the information he receives” (J. W. Books & Prysby, 1991: 52) – which is most likely the case for the sources of information already described. Since we use the term 'some aspect' in this explanation, we can apply this theory for a broad range of contextual influence that

varies by place, including the contexts mentioned earlier in this section: *social context*, *economic context*, and the *context of mass media*.

The theoretical considerations of the last sections are now summarised in a model (see Figure 1 below). In this model, one can see how influence of the (economic, social, and media) context is transmitted through the different sources of information (informal interaction, organisationally based interaction, personal observation, and mass media).

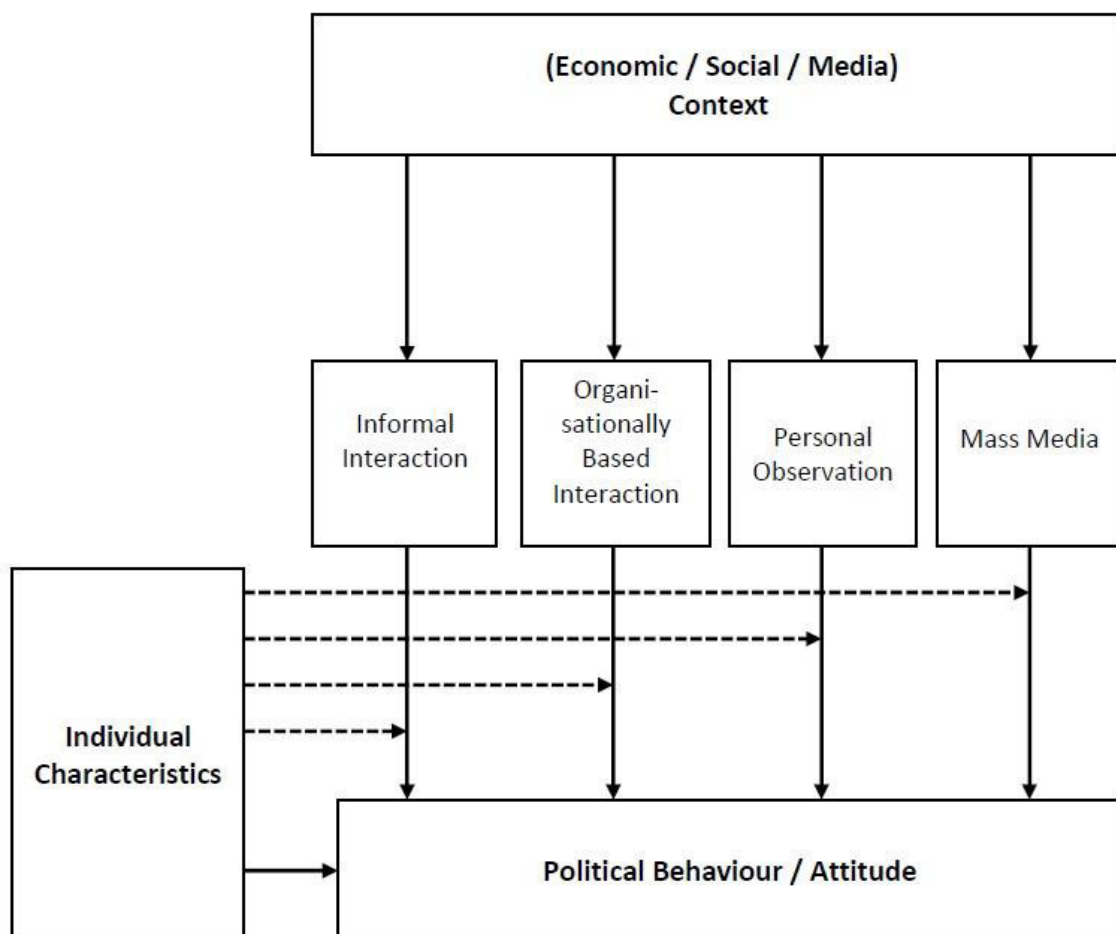


Figure 1: Model of contextual influence and information flow

This transmission is, however, also influenced by individual characteristics since not everyone might be affected by context in the same way. Therefore, I also expect individual characteristics to influence the impact of the local context by influencing its transmission to the individual. For instance, voters who are more aware of their context and its composition and condition (because they live for a long time in this context) should be influenced more strongly. Individual characteristics, of course,

also influence a person's political behaviour for itself (and most likely to a rather large extent).¹⁴

However, another important thing that should be mentioned at this point addresses the dependent variable and its negligence in this section. Since the focus of this study is the investigation of contextual effects the research interest heavily lies on the independent variables (and the investigation of its influence regarding strength, significance, and moderating variables). This is different than in other political science studies that focus on the dependent variable(s) and its (their) explanation. Consequently, the dependent variable of this study is rather secondary, while the independent variables that correspond to the economic, social and media context are more important for answering this thesis' research question and accompanying sub-research questions.

¹⁴ Since this section's aim mainly was to sketch out the underlying processes of contextual influence, moderating individual characteristics (such as the contextual awareness mentioned above) will not be addressed here. Instead, they will be discussed in the analytical chapters on economic, social, and media context below.

3. Case Selection and Relevance

The question is now: *How* and *where* should contextual effects on political behaviour be studied? The first question, *how* we can investigate contextual effects, will be discussed later in section 4.2. First, I will turn to the question of *where*, in which country or countries or in which geographic area in general this investigation of contextual effects should be conducted.

3.1. Regional Location and Party Choice in Europe

Place specific political behaviour can be observed in almost every (European) country; however, the strength of contextual influence is likely to vary by place, time, and country. Unfortunately, systematic investigations and comparisons of contextual influence on political behaviour across different countries are rare. However, there are still some studies that address the influence of context on political behaviour or how party support differs among various countries.

Caramani (2002) presents different indicators that measure territorial homogeneity of voting behaviour in Europe. In this paper, the analysis of homogenous party support (that is an almost equal support for every party across different regions within a given country) is especially interesting for this thesis' research interest. Using historical data, Caramani shows that the homogenisation (or in other words; the decline of contextual influence or the regional cleavage on voting) of voting behaviour started early in European history.

After World War I, European party systems stabilised and territorial diversity of party support dropped. Since World War II, however, territorial homogeneity of party support is rather stable. Thus, contextual influence on party support decreased between the time before World War I and after World War II.

Another of Caramani's findings shows that the process of party support homogenisation affected various parties and party families differently: While voters of liberal and conservative parties were spread across the whole country from the beginning of parliamentarianism onwards (and, thus, spatial homogenisation of their electorate was large), this process started later for the electorate of socialist and agrarian parties. However, this study also shows that regional differences in voting behaviour did not completely vanish in Europe but have rather declined. Even though

regional influence on voting behaviour got weaker, voting behaviour across different regions is still heterogeneous. But *how strong* is the contextual influence on political behaviour; and in *which countries* can this contextual influence be studied?

Knutsen (2010) investigates in the tradition of urban-rural (regional) cleavage theory (Lipset & Rokkan, 1967) to what extent regional location influences party choice in 15 Western European countries. He finds that the strongest influence of regional location on political behaviour within a country can be observed in Belgium and Germany (Cramer's V between region and party choice is 0.336 and 0.337, respectively). On the other hand, there is only weak influence of region on party choice in Portugal, France, and Denmark (Cramer's V is 0.088, 0.099, and 0.123). The mean influence of region on party choice across the total of 15 countries is reported as Cramer's $V = 0.19$; which can be regarded as an only medium correlation between region and party choice.

These results show two things: First, there still is a considerable influence of region on party choice even though Caramani (2002) shows that the territorial diversity of party support decreased after World War I and got rather stable after World War II. Second, this influence does also considerably vary between different European countries and ranges between a rather strong and a negligible impact.

Another question that Knutsen investigates in his study is the influence of social structure, value orientations, and territorial identities on the regional impact on party choice. He hypothesises that a certain amount of what had been regarded as regional influence can be explained by compositional effects due to the inhabitants of the regions. Regional influence on party choice, then, could be to a certain extent regarded as the mediated influence of these confounding variables since the population is not equally distributed across all regions and regional influence, thus, should be rather regarded as the impact of the composition of regions' inhabitants (Marsh, 2002).

In his study, Knutsen (2010) shows that on average around 56 per cent of regional influence on party choice can be explained through other (non-spatial) variables. Looking at this influence of social structure, value orientations, and territorial identities in detail, Knutsen concludes that social structural composition of European regions is the most important factor in the explanation of this regional cleavage on party choice: On average, 41 per cent of the regional cleavage can be explained

through social structural composition of the regions in question. Other factors that had been investigated, that are value orientations and territorial identity, only play minor roles in the explanation of regional cleavages for most countries.

The consequences from Knutsen's analysis of the regional cleavage in Europe for this study of contextual effects on political behaviour read as follows: First, since the lion's share of regional cleavage influence on party choice is mediated through other non-spatial variables, the effects that can be expected will be rather weak. Second, it is of high importance to take care of social structural and sociodemographic variables in the analysis since these factors seem to play the most important role in regional effects and are, therefore, to be seen as compositional and non-spatial impact. Third, the case(s) that will be investigated should be also chosen with care since the impact of region on party choice as well as the importance of non-spatial variables regarding regional differences varies between countries.

However, there are two ways how contextual impact could be studied: First, one could aim for a *comparative analysis of different countries* in which lower-level regions are nested. By doing so, the highest level would be represented by countries while lower levels are regions within these countries. Second, one could *analyse only one country in detail* by using different regions within the same country to investigate contextual impact. Since the aim of this study is to analyse different kinds of context, the economic context, the social context, and mass media context, a in depth analysis of only one country seems to be the best choice. However, this leads to the question of which country shall be analysed?

3.2. The Case of Austria

Regarding the question on the choice of country for analysis, it can be stated that neither a country with a comparatively strong nor a country with a comparatively weak influence of region on party choice should be the first choice. In both cases, if such an extreme case is studied, one could run into danger of over- or underestimating the effects of region on political behaviour. Consequently, generalisation of results could suffer.

Thus, the country that is going to be investigated should be close to the mean regarding the mediated influence of other non-spatial influencing variables that push or lower contextual influence. This should be done in order to not investigate an

extreme case in which other variables, such as social structure, value orientations, or territorial identities investigated by Knutsen (2010), play a comparatively minor or major role. If this influence is rather moderate, the extent of contextual influence on political behaviour can be estimated as being on the expected (and thus average) level.

Both requirements for the choice of country apply to Austria. Even though some researchers state that the rural-urban (regional) cleavage in Austria can be regarded as the mediated impact of social class and religion (see Kritzinger, Zeglovits, Lewis-Beck, & Nadeau, 2013 for the discussion about regional impact in Austrian politics), Knutsen (2010) finds a (slightly below average) correlation of region and party choice in Austria (Cramer's $V = 0.15$). Additionally, the amount of regional influence on party choice that can be assigned to the other non-spatial variables in his study is also only slightly above the mean for all countries investigated (on average 56 per cent and 60 per cent in Austria).¹⁵

However, also regarding another rather global variable Austria would be a good choice for the investigation of contextual influence: Even though Austria is a federalist country (such as Germany and Belgium which show high levels of regional influence on political behaviour), it is one of the most centralist among other federalist countries (Jenny, 2013). So, we can assume that Austria also takes a medium position regarding the political system and its extent of federalism and centralism.

Thus, from a theoretical perspective the case of Austria seems to be a good choice for investigating contextual (or in Knutsen's words: regional) impact on political behaviour: The overall correlation between region and party choice is more or less the average amount that can be expected in Europe and, additionally, other non-spatial influence (e.g. through composition effects within the region) is only average as well.

Another fact that speaks for the investigation of Austria as a case in studies on contextual influence is the availability of high quality data provided by the *Austrian National Election Study* (AUTNES).¹⁶ The data collected by AUTNES consists of several voter surveys collected before and after the Austrian National Election 2013.

¹⁵ In his detailed analysis on which factors do have the strongest impact, Knutsen finds that social structure is especially important in Austria while the other two variables, value orientations and territorial identity, do explain a comparatively small amount of regional impact.

¹⁶ See below on and <http://www.autnes.at/>.

Additionally, using information provided by the different AUTNES surveys, voters can be located in space and so contextual analysis can be properly conducted (see section 4 on the data provided by AUTNES). However, before the data collected by AUTNES is presented, Austria and Austrian politics shall be discussed briefly.

3.3. Austrian Politics in a Nutshell

What do we know about (regional) voting and, especially, the regional cleavage in Austria? Or what do we know about Austrian politics in general? First of all, Austrian politics and the Austrian political system after World War II can be best described as being dominated by the two mainstream parties the Social Democratic Party of Austria (SPOe) and the conservative Austrian People's Party (OeVP) until the 1990s.

In the 1980s, however, two 'new' parties entered the electoral arena with the radical-right party Austrian Freedom Party (FPOe) becoming more and more popular (even though FPOe or their predecessor party VDU had been represented in the Austrian parliament since the late 1940s) and the newly founded Greens entering the parliament after the 1986 election. This increasing popularity of FPOe led in the year 2000 to the first government without the participation of SPOe since the 1970s. After a period of an OeVP and FPOe government between 2000 and 2007 (with the last two years being an OeVP and BZOe, Alliance for the Future of Austria, government after a split of FPOe), the so-called 'grand coalition' of SPOe and OeVP came back to power. Since then, the grand coalition is again governing the country with three opposition parties (FPOe, BZOe, and the Greens) in parliament before the 2013 Austrian national election (see Kritzinger et al., 2013 for a more detailed overviews). This is the time where this thesis' analyses start.

Having a closer look on the federal election results of 2013 in Austria, we can observe a picture that provides evidence for regional effects on political behaviour. However, let us start with the election results on national level and not taking different regions into account: SPOe came in first with a total vote share of 26.8 per cent, followed by OeVP with a vote share of 24 per cent. FPOe came in third with a vote share of 20.5 per cent. BZOe, the fourth biggest party in the 2008 Austrian national election, failed to reach the threshold for entering the Austrian parliament and gained only 3.5 per cent of all votes. The Greens had a vote share of 12.4 per cent; Team Stronach was already represented in the Austrian parliament but never ran for a national election

before, it had a vote share of 5.7 per cent. Last, the newly founded liberal party NEOS also entered parliament with an electoral support of 5 per cent (BM.I, 2013).

Looking at the results on the level of federal states (*Bundesland*), that is the second lowest level of federal political representation in Austria, we see some evidence for contextual impact on political behaviour or regionalisation of voting.

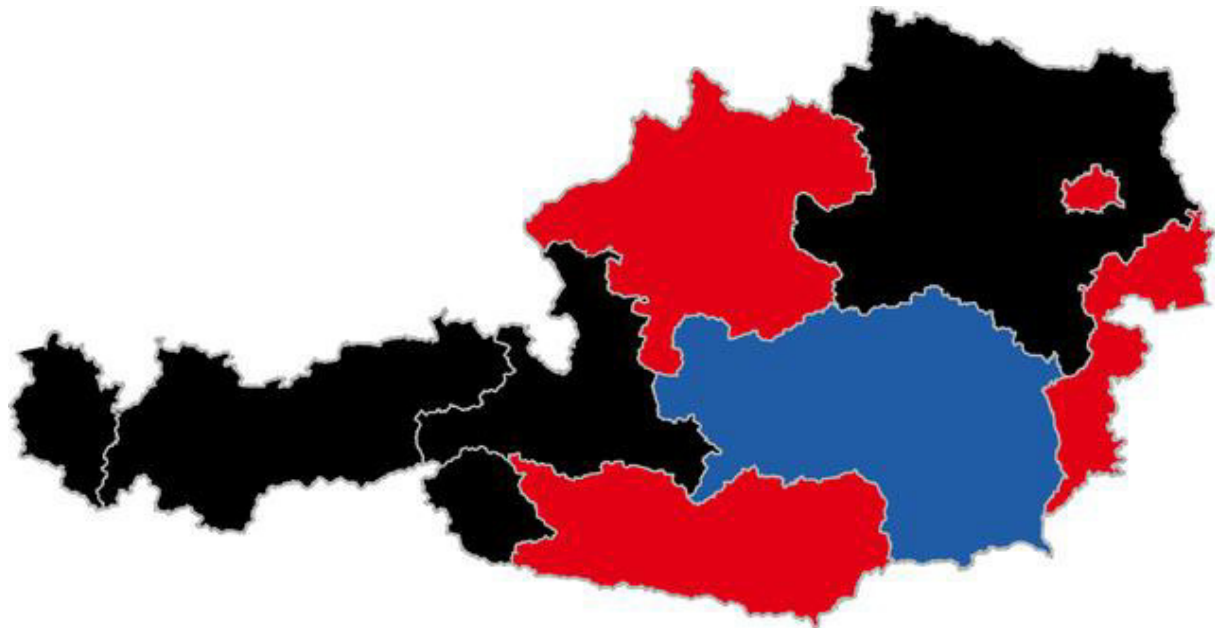


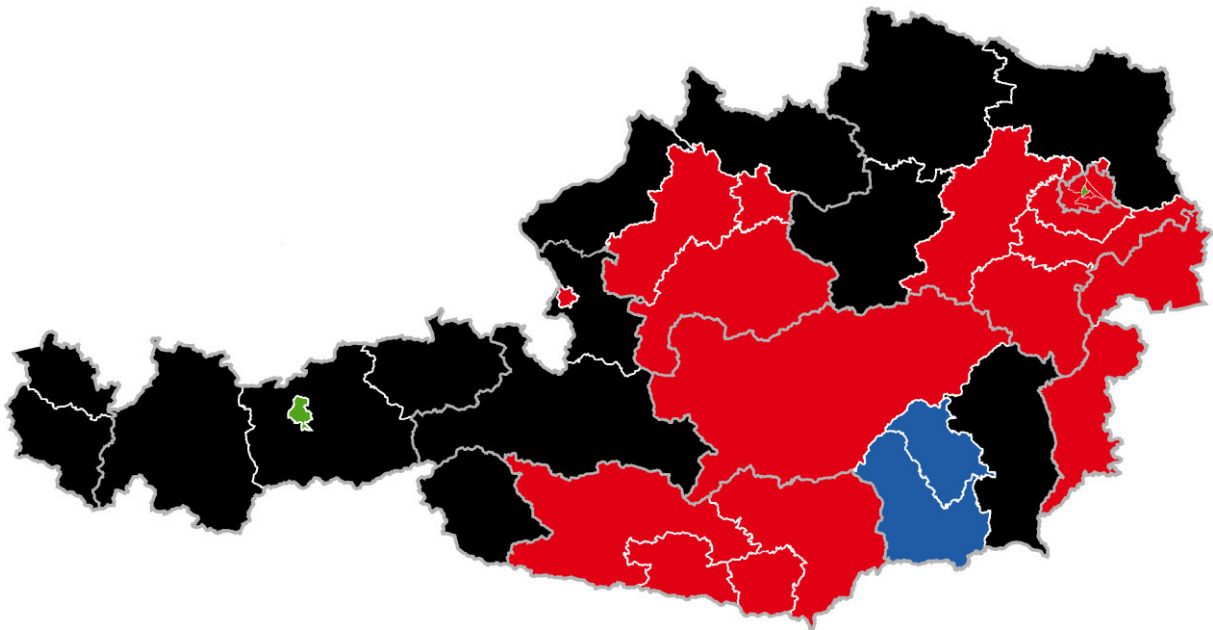
Figure 2: Largest vote shares per party (states, Austrian National Election 2013)¹⁷

We see that OeVP (black) won the national election in four out of nine federal states, SPOe (red) came in first in four other states while FPOe was the most successful party in the federal state of Styria. However, we also see that OeVP is especially popular in the Western part of Austria while SPOe was most successful in the Eastern and Central parts of the country by winning in the federal states of Burgenland and Austria's capital Vienna as well as Upper Austria and Carinthia. Moving down another level to the regional constituencies (the lowest level of federal political representation in Austria) shows an even clearer picture.

To be more specific, we can now observe even clearer tendencies of an east-west divide in Austrian politics: While the Social Democratic SPOe mostly gained comparatively low vote shares in the western regions in Austria in the federal election 2013, the Christian Democratic OeVP has its strongholds in the Western part of Austria. This picture turns when we look east: Here, SPOe has its strongholds in the

¹⁷ Source: Täubler (2013c)

industrialised city of Linz, the former industrialised region of upper Styria, the rural Burgenland, and SPOe's traditional heartland Vienna. In turn, OeVP is doing worse in the east than in the west; apart from the state of Lower Austria, there are no (or only few) regions in the east where OeVP has a stronghold or is highly popular among voters on federal state level. This picture of an east-west divide between the two governing parties SPOe and OeVP did not change much in the most recent federal election in September 2013 and had also been observed throughout the elections in the Second Austrian Republic after World War II.



**Figure 3: Largest vote shares per party
(regional constituencies, Austrian National Election 2013)¹⁸**

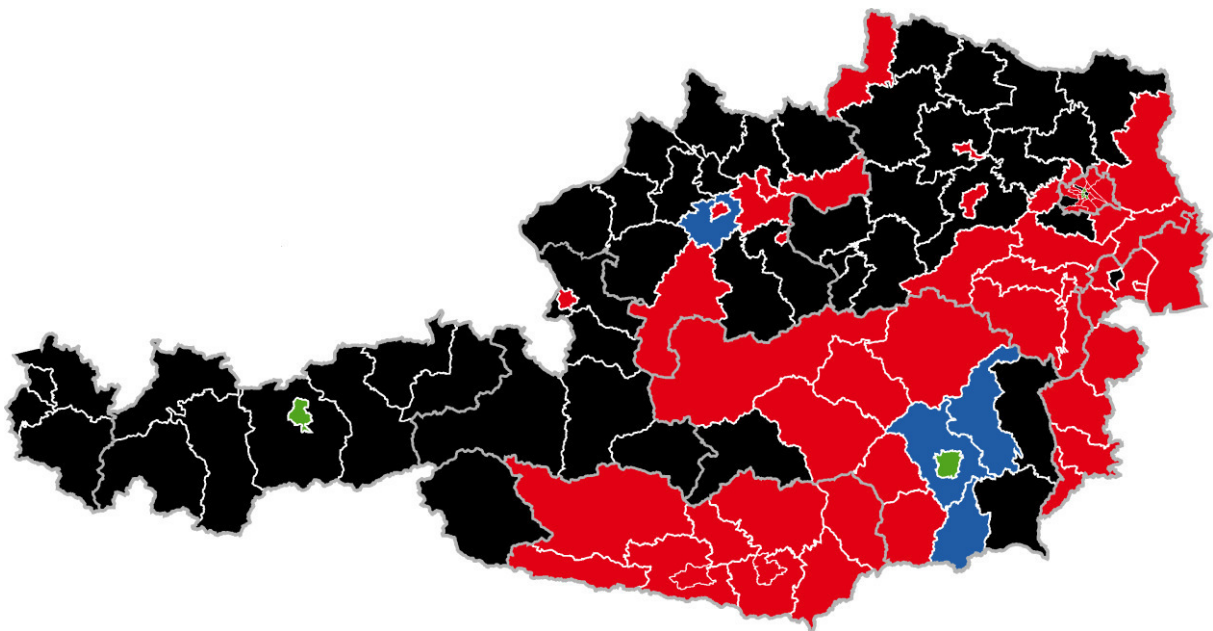
In the Austrian federal election of 2013 the right-wing populist FPÖe was the most successful party in the state of Styria. However, if we have a closer look on the level of regional constituencies we see that this is only true regarding two regional constituencies (however, the state capital of Graz is located in one of these two regional constituencies) with the other regional constituencies in the Eastern part of Austria being dominated by SPOe (with only one exception where OeVP has the highest vote share).

In Figure 4 (below), the most successful parties for each political district (which is the second lowest administrative level in Austria but not an electoral tier in federal elections) are presented. OeVP is still doing well in the West and in some regional

¹⁸ Source: Täubler (2013b)

constituencies in Lower Austria while SPOe has the highest vote shares in the South Eastern states of Upper Austria, Styria, Carinthia, Burgenland, and Vienna. FPÖe was the most successful party in four political districts and the Greens were the most popular party in the political districts of the city of Innsbruck and the city of Graz.

Climbing down the ladder a little bit more on political district level gives us a more pronounced but rather similar view on electoral results of the Austrian federal election 2013. We can still observe geographical clusters of party support for SPOe and OeVP but for FPÖe as well, even though this cluster is smaller than the SPOe and OeVP clusters. However, there are also some political districts standing out as (mostly Social Democratic but also Green or Christian Democratic) ‘political exclaves’; these ‘exclaves’, however, are larger cities in overwhelmingly rural areas in most cases. In order to not only rely on pictures, descriptive results, and first glances; Jenny (2009) investigates whether and to which extent Austrian voting behaviour is actually regionalised.



**Figure 4: Largest vote shares per party
(political districts, Austrian National Election 2013)¹⁹**

Jenny concludes that Austrian voting behaviour is at least regionalised to some extent: Electoral results are in fact dependent from their positioning in space and volatility of neighbouring regions is higher than it is for non-neighbouring regions. This especially is true in case the regions are within the same state. Therefore, the

¹⁹ Source: Täubler (2013a)

famous first law of geography postulated by Tobler (1970: 236f) can also be observed regarding regional voting in Austria: “[E]verything is related to everything else, but near things are more related than distant things”.

This observation shall be the starting point of this study. We see that electoral outcomes in Austria are regionalised and that there are clusters of political party support across the landscape. These clusters can be observed for the most recent Austrian national election of 2013, but had been also observed throughout the Second Austrian Republic after World War II. However, we do not know yet whether this is only an aggregate effect and the outcome of elections in different geographic areas, or whether this regionalisation of political behaviour also influences individual political behaviour?

4. Data and Methods

In order to carry out contextual analysis as it is the aim of this study (that is by linking macro-level predictors with micro-level outcomes), data from two different analytical levels is needed: First, one needs *individual-level data* that provides us with information about the voters: How they evaluate parties and candidates, what their social structural position is, how old they are, what level of education they have reached, and, of course, where they live. In short, we need basic information about their political behaviour and sociodemographic positioning as it is included in almost all observational election studies. However, we also need information about the respondents' location to locate them in space and, then, investigate the influence of their spatial context.

Second, for capturing the effects from the respondents' geographic place, we also need *aggregate-level data* that describes the respondents' home region regarding its economic and social condition or regarding the popularity of mass media outlets. This can be reached by using several theoretically useful aggregate-level variables that are usually provided by national statistical offices, national labour bureaus, the media, and other data sources. Once these two different forms of data are available, they can be combined into one single data set and studied simultaneously in order to investigate what the effect of the respondents' geographic place – the context – on their political behaviour is and how the environment influences individuals (J. W. Books & Prysby, 1991).²⁰

However, I stick with the definition and use of contextual analysis as it has been used by Books and Prysby since it explicitly targets the phenomenon of interest in this study: “For us, contextual analysis is a multilevel analysis which investigates the effects of characteristics of collectives on the attitudes and behavior of the members of collectives [...] We limit our definition to effects on individual behavior from characteristics of geographical units in which the individuals reside” (J. W. Books & Prysby, 1991: 5). These characteristics of geographical units had been labelled as aggregate-level data above.

²⁰ Of course, different definitions of the term contextual analysis exist (as already mentioned in the introduction of this study) and there are also different views on contextual analysis and its proper conduction.

The analyses of contextual effects on political behaviour and the intervening individual-level variables and analytical scales will be carried out in this study using data from the Austrian National Election Study (AUTNES). The AUTNES voter surveys provide high quality individual-level data that includes all the necessary information needed for such an analysis. Without going into too much detail at this point, these variables include information on individual characteristics of voters, on political discussion with others and media consumption (see chapter 6 for more information on these variables and their use for this study), on voters' evaluations of the economy (see chapter 5), on their propensity to ever vote (PTV) for the parties running for election, on candidate and party evaluations (see section 4.3.1) and, of course, many more variables.

However, the AUTNES voter surveys not only include the necessary individual data, they also include information on where respondents live – in which political district and regional constituency – and, therefore, it is possible to capture the operating contextual effects. Because of the information about a respondent's location, her individual-level survey data can be merged with aggregate-level data that includes the characteristics of her home place. Consequently, respondents living in the same context also share the same contextual variables while their individual-level variables remain, of course, individual and usually different from each other. By combining different levels of data (individual and aggregate data) in such an integrated research design, the theoretical power of data analyses is improved and proper analyses of contextual effects as it had been suggested by J. W. Books and Prysby (1991) is ensured.

4.1. Levels of Analysis

In order to conduct contextual analyses data that had been collected on (at least) two levels is needed; the individual level and the contextual or aggregate level. Then, the respondents' individual-level data has to be combined with aggregate-level data of their context in order to create a dataset that contains individual data as well as contextual information (J. W. Books & Prysby, 1991).

However, we can think of many different contextual levels; we could collect and add data from the municipalities and cities in which the respondents live, or use the highest contextual level in Austria, the federal state, instead. Both decisions, of

course, would possibly result in different results and would be based on different theoretical considerations and reasons. The question which analytical level is the best suited for such an analysis depends on theoretical considerations as well as on practical considerations regarding data availability.

The municipality as level of analysis might be one of the first thoughts that come into one's mind when thinking about analytical levels in contextual research: If we assume that *all politics is local*, the municipality should be the proper level of analysis since it is the most local (because lowest) level of spatial integration. However, there is also good reason for not using municipality data when analysing contextual effects.

First, people do in fact live in municipalities, but they also do not cut off their interactions with others or their personal observations at the borders of these municipalities. On the contrary, most people's interaction patterns and personal observations cross these borders nearly every day and people are more mobile nowadays than they had ever been before. The influence of mass media, which of course is likely to be regionally different in some aspects, also does not stop at the borders of municipalities. So, the municipality seems to be only ill-suited to capture the information flow of contexts. In case individual data would be merged solely with municipality data, we would place ourselves in danger of not capturing contextual influence on the level where it actually occurs (Pokorny, 2012). Therefore, we can conclude that the municipality as an analytical level might be too low-scaled for theoretical reasons and that other higher-level areas should be analysed instead.

Second, there are also pragmatic reasons for not choosing the municipality as level of analysis: Most administrative data in Austria is not available on such low levels as the municipality but data availability gets better the higher the level of analysis is. Therefore, even if we wanted to analyse contextual influence on the municipality level for theoretical reasons, data availability could cause trouble. This rather pragmatic consideration, however, should be also kept in mind when setting up a research project.

We see that the analytical level of municipalities might not be the best choice for investigating contextual effects in Austria. However, since the municipality is not the appropriate level of analysis for the reason of crosscutting contextual influence

patterns, a higher-level unit such as the ‘region’ most likely is.²¹ Only in very rare cases (e.g. long-distance commuters) or especially in places close to borders to other regions, everyday interaction, information, and mobility patterns are likely to cross regional borders. However, the concerns regarding places close to borders and cross-cutting patterns of interaction, information, and mobility of inhabitants of these places are immanent in research on areally defined contextual effects (Pokorny, 2012: 81). For this reason, we have no other choice than simply accept this fact and to keep this problem in mind even though we would have to classify it as ‘noise’ in the actual data analyses.

But what administrative or spatial level can be regarded as the relevant context of political behaviour; what administrative unit comes close to the concept of the ‘region’? Since contextual analysis needs aggregate-level data, we most likely must stick with administrative units for which data is collected, edited, and provided by official sources. Therefore, the choice of level is inherently limited and should be oriented towards the administrative structuring in the country of interest and theoretical considerations.

In research on contextual effects in Austria, the political district seems to be the first (and best) choice for a definition of relevant regional context: Only few people leave their political district in their everyday routines, except for those living close to the border or urban areas (in the Austrian context cities such as Vienna, Graz, Linz, Salzburg...) where the political district matches with the municipality border and, thus, is comparatively small.²² In total, there are 95 political districts in Austria at the time of writing, which seems to be a suitable number for analysing contextual effects (see section 4.2 on methods below).

However, since the investigation of different levels of contextual influence is also a central aspect in this study, a second aggregate-level needs to be introduced. This second level of contextual influence can be found in regional constituencies; the lowest level of federal political representation in Austria. There are 39 regional constituencies in Austria which consist in most cases of several political districts.

²¹ The term ‘region’, however, can mean very different concepts since there is no clear definition of what the ‘region’ is. Usually it is applied for places larger than the municipality, but its upper bounds, however, might vary from country to country and might be also dependent on the size of the country.

²² However, as already outlined above, this problem in contextual analyses using administrative units cannot be solved and must be accepted since there is no other way. Similar problems would also arise in case the municipality would be used instead of political districts (or any other form or regionalisation of space).

Thus, regarding the relationship between respondents, political districts, and regional constituencies, a hierarchical data structure can be ascertained: Individuals (Level 1; R) are nested within political districts (Level 2; PD) which are nested within regional constituencies (Level 3; RC).

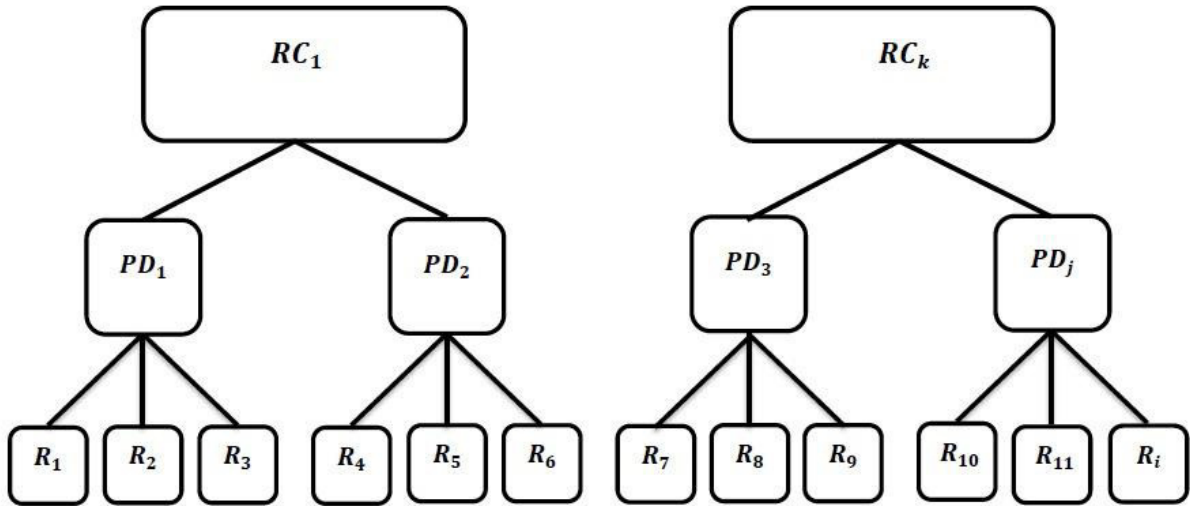


Figure 5: Hierarchical data structure of respondents (R), political districts (PD) and regional constituencies (RC)

The data structure of this study is *not* cross-classified; individuals living in the same PD are also nested within the same higher-level RC. RCs usually consist of several PDs (with some exceptions, see below) and every PD belongs to only one RC (with one exception, see below). Because of this data structure, aggregate (contextual) variables operating on PD level can be aggregated up to RC level by summing up the absolute numbers from the districts nested within the same RC or calculating mean values of PDs belonging to the same RC.

But there are also some exceptions in this hierarchical data structure: First, and less problematic, there are three regional constituencies that consist of only one political district; the regional constituencies/political districts of the city of Salzburg, the city of Innsbruck, and Eastern Tyrol with its district capital (*Bezirkshauptstadt*) of Lienz. In these three regional constituencies/political districts, no variation between Level 2 (political district) and Level 3 (regional constituencies) is to be expected – both administrative units cover the very same area only with different classifications and names.

Second, regarding Vienna, which is a federal state, a political district, and a municipality, there is a quite special situation: The political district has to be regarded as a higher-level context compared to the regional constituencies since regional constituencies in the state of Vienna consist of several municipality districts of Vienna (*Wiener Gemeindebezirke*), while Vienna, as a political district, is an own state constituency (*Landeswahlkreis*), because Vienna is also a federal state (*Bundesland*). Usually, these three administrative levels are nested within each other, however, this situation in Vienna must be considered to conduct proper data analyses. To solve this problem, the municipality districts of Vienna are treated in the same way as PDs outside of Vienna are treated in data analysis and, thus, constitute the lowest level of contextual analysis (even though they are located on a lower administrative level as the political district and municipality of Vienna is). RCs of Vienna, however, consist of several municipality districts. Consequently, the political district and municipality of Vienna is not part of this analysis, instead its municipality districts and RCs are used because of Vienna's special status.

Summing up, the data structure of respondents (R) nested within political districts (PD) nested within regional constituencies (RC) is a little bit messy and not always that clear as it should be, especially regarding Vienna. For the sake of keeping a hierarchical data structure of respondents nested within level 2 units that are nested within level 3 units in Vienna, the 23 districts of Vienna (*Wiener Gemeindebezirke*) are used as level 2 units for Viennese respondents instead of the PD. The third (and highest level) of context in Vienna, however, are still RCs. By doing so, statistical analyses can be analogously performed for every respondent (regardless of her actual spatial location) since the seven RCs of Vienna consist of several *Wiener Gemeindebezirke*. The three-level hierarchical structure, consequently, is roughly the same for respondents in the city of Vienna (that are nested in districts of Vienna which are nested in RCs) and respondents living outside Vienna (that are nested in PDs which are nested in RCs).

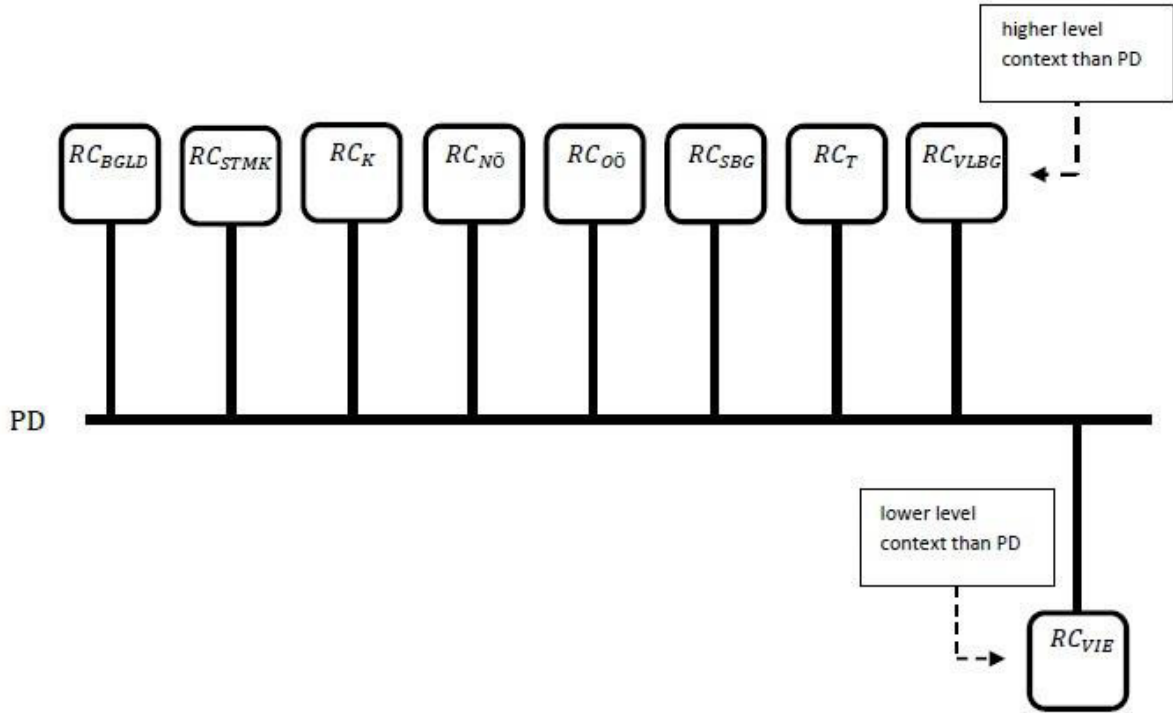


Figure 9: Regional constituencies (RC) and political districts (PD) in the nine Austrian states

These two conceptualisations of region, the PD and the RC, should also match with the contextual influence that voters experience in their decision-making process. By undertaking research on the analytical levels of PDs and RCs, describing contextual influence on political behaviour is possible. Higher-level units such as the federal state might be too large to properly study contextual influence in Austrian politics. The same applies for comparative research on contextual effects that usually takes whole nations or other higher-level regional classifications into account (see e.g. Knutsen, 2009 for another regional approach on a higher level).

4.2. How to Analyse Contextual Effects

The research question of this PhD thesis is going to be answered by using a quantitative research design and individual as well as aggregate-level quantitative data. Since the research design and data described above includes hierarchically structured data with individuals nested within places (to be specific: individuals that are nested within political districts that are nested within regional constituencies), such analyses can be conducted best by using multilevel analysis (see Hox, 2010). By doing so, the analytical power of electoral research can be increased because both

individual (voter) and aggregate (contextual) data on different levels can be simultaneously analysed (Kelvyn Jones, Johnston, & Pattie, 1992).

The analytical method of multilevel analysis (also known as multilevel or hierarchical modelling) allows us to investigate relationships between the individual and groups, between agents and society, or between voters and contexts, respectively. The underlying idea behind multilevel analysis is that “individuals interact with the social contexts to which they belong, that individual persons are influenced by the social groups or contexts to which they belong, and that those groups are in turn influenced by the individuals who make up that group” (Hox, 2010: 1) – an assumption that is also included in the model of information flow and processing (see section 2.2 and 2.3). So we see that this analytical method is very well suited for answering the research question(s) of this thesis and for investigating contextual effects on individuals in general, while taking their individual characteristics into account as well (Gelman, 2006).

Multilevel analysis is a powerful tool for the investigation of contextual effects on political behaviour since it explicitly takes similarity between different individuals that belong to the same group into account, as it is assumed in hierarchical data structures. In turn, ordinary (single level) regressions models assume that all observations are independent from each other; which might lead to inferential errors in case hierarchical data is analysed (Kelvyn Jones, 1991). Thus, total variance can be decomposed into within cluster (individual) and between cluster (contextual) variance when multilevel analysis is used (Hox, 2010): A high amount of between cluster variance indicates that higher-level cluster effects (in this case contextual effects) are operating while a high amount of within cluster variance (with a small share of between cluster variance) would indicate that contextual effects are rather small at best.

In multilevel analysis, variables can be defined at any hierarchical level. Variables can be measured directly on the level on which they occur or can be moved between different analytical levels by aggregation and disaggregation. Hox (2010) distinguishes between three kinds of variables in multilevel analysis: *Global variables* refer only to the level on which they are observed; they cannot be aggregated or disaggregated. Hox gives student's intelligence or gender as examples for a student

(level 1) global variable and school's size as an example for a school (level 2) global variable.

Structural variables are constructed from lower levels (usually level 1 or individuals) and refer to higher-level units; e.g. the average intelligence of individuals on level 1 can be aggregated up to the variable 'school mean intelligence' that refers to the higher-level unit of school (Hox, 2010). The same would be true for average party evaluations on PD or RC level and aggregation of individual party evaluations.

Finally, *contextual variables* on higher levels can also be disaggregated to lower levels by assigning all level 1 observations that belong to the same higher-level unit also the same higher-level value; e.g. the mean value of student's intelligence or the global level 2 variable of school size can be assigned to all students belonging to the same level 2 unit 'school'. By doing so, contextual information can be included in individual-level datasets and contextual analyses can be performed. In case higher-level variables such as 'mean unemployment rate per political district' or 'age structure per political district' from administrative institutions are used, these variables must be classified as *contextual* variables since this information has not been aggregated from the individual observations but rather from the population.²³

Thus, according to Hox, only 'real' contextual variables and no structural variables will be analysed in this study. This means that the higher-level information included in this study is 'real' contextual information and had not been aggregated from individual observations. On the contrary, this information is usually provided by officials and thus includes *every* individual located in space, no matter whether she was part of the individual-level survey or not.

The use of multilevel analysis allows us to test three types of hypotheses (Aguinis, Gottfredson, & Culpepper, 2013): First, we can investigate *lower level direct effects* that are, basically, used for testing single-level hypotheses with the only difference that similarity of lower-level units (in our case voters or respondents) is taken into account. However, in this kind of analysis contextual data or any other spatial factor is not included.

Second, we can test whether context has a direct effect on individual level outcomes by investigating so-called *cross-level direct effects*. In this case, it is assumed that a

²³ However, using survey information to calculate e.g. mean district level issue positions and assigning these values to the PD would of course be defined as structural variable.

higher-level (contextual level 2, level 3...) variable has an immediate effect on an individual-level (level 1) outcome; e.g. that contextual unemployment rates directly influence individual-level party support. By investigating cross-level direct effects, we can get a first insight into contextual influence.

However, multilevel analysis also allows for the investigation of *cross-level interaction effects* by investigating whether the relationship between two individual-level (level 1) variables changes as a function of a higher-level (level 2) variable (that is an interaction with this higher-level variable). Conversely, it can also be investigated whether the cross-level direct effect changes when another level 1 variable is introduced as an interaction term. Summing up, multilevel analysis allows us to test several kinds of hypotheses, including hypotheses that explicitly address research questions regarding contextual influence (cross-level direct effects and cross-level interaction effects) or single-level research questions while controlling for spatial clustering.

The main outcome variable of this study, individual party preferences (see below section 4.3), will be analysed using all three kinds of hypotheses; *lower-level direct effects*, *cross-level direct effects*, and *cross-level interaction effects*. However, the first-mentioned type of hypotheses is not part of this study's main research interest and, thus, will be analysed only to control for individual-level influences. The other two kinds of hypotheses will be investigated using different contextual-level and individual-level variables that vary depending on the chapter's research question. The individual-level dependent variable, however, remains the same in most analyses.

4.3. Data and Operationalisation

The individual-level dataset used for this study of contextual effects in Austrian political behaviour is the AUTNES Online Panel Study (Kritzinger et al., 2016a, 2016b). This data had been carried out using a high quality online panel and computer assisted web interviewing and covers the 2013 electoral campaign (wave 1 to wave 4) as well as the European Elections 2014 (wave 5) and an inter-election wave carried out in 2015 (wave 6). Sociodemographic characteristics of respondents are largely in line with the corresponding numbers in the population.

The first panel wave of the AUTNES Online Panel Study was carried out between August 6 and August 28 and, thus, covers the time before the actual start of political

campaign (and, thus, acts as a pre-campaign measurement). Later panel waves carried out in 2013 cover the campaign period from end of August until the election day of September 29, 2013. Additionally, the fourth panel wave is the accompanying post-election survey carried out from right after the election until October 7, 2013. The European Elections module covers the period between May 30 and June 6 while the inter-election wave was carried out from October 14 to November 3 and between November 13 and November 25 2015 (Kritzing et al., 2016b).

In this section the data used for analysis will be described. Sociodemographic variables that are used as control variables in statistical analyses are included in every contextual analysis of this thesis and, thus, will not be presented separately in each analytical chapter. The same applies to spatial distribution or clustering (except for chapter 7 in which a different spatial structure must be applied).

In the datasets, there are $n=3,084$ respondents in total. Of these 3,084 respondents $n=2,959$ observations can be located in space (PD level) and, thus, are nested in the $N=117$ political districts or districts of Vienna.²⁴ There is at least one observation in each PD and 164 observations at the maximum in one PD/district of Vienna. The mean value of observations per district is 25.3. Regarding the higher-level units of RCs; the 2,959 observations are nested within the 39 regional constituencies of Austria. The minimum value is 13 observations in at least one RC, the maximum is 207 observations in at least one RC (mean value 75.9).

	N	Min	Max	Mean	n
PD	117	1	164	25.3	2,959
RC	39	13	207	75.9	2,959

Table 1: Spatial Distribution of Respondents in PDs and RCs

However, we see that there is at least one PD from which only one observation belonging to this PD is included in the dataset. Additionally, we see that we have enough higher-level units (117 and 39, respectively) for analysing contextual effects using multilevel analysis. We do not know (yet) how many (and which) political districts have low numbers of respondents but we know that multilevel analysis uses the individual observations nested within the same higher-level unit in order to estimate the relationship between variables on individual level. Thus, in order to get

²⁴ To be specific; there are 95 PDs in Austria in total. However, instead of the PD of Vienna, its municipality districts ($N=23$) are used. Thus, only 94 ‘real’ PDs and 23 Viennese districts are included in the analyses as lowest level.

more meaningful results, political districts with less than five observations are excluded from this analysis (even though such a strict approach regarding low numbers of level 1 observations is not necessary by all means, see Wenzelburger, Jäckle, & König, 2014). Conclusively, 14 observations that are nested within six political districts are excluded from analysis. The high number of level 2 and level 3 units (117 and 39) is fine since this helps us to estimate the differences between the higher-level units (Kelvyn Jones et al., 1992; Wenzelburger et al., 2014).

Table 2 gives an overview of the number of excluded respondents and PD with less than five observations. Regarding the level 3 units of regional constituencies, there are no problems to be expected since the number of regional constituencies is still quite large (N=39) while the minimum of 13 observations in at least one regional constituency is fine for the analysis.

Name	Frequency	Percent
Rust (Stadt)	1	7.14
Hermagor	2	14.29
Waidhofen an der Ybbs (Stadt)	3	21.43
Eferding	4	28.57
Tamsweg	2	14.29
Reutte	2	14.29
Total	14	100

Table 2: Excluded Political Districts and Number of Observations within Districts

4.3.1. Individual Level Data: Dependent Variable

Even though the main focus of this study is contextual influence, there is, of course, also a dependent variable that is influenced by contextual effects. However, this dependent variable mainly serves as an example of contextual influence on which the impact of context will be investigated and presented. Since I want to show the influence of higher-level variables on lower-level (that is individual) variables, this dependent variable was, of course, measured on the individual level as *individual party preferences*.

The dependent variable of this study ‘*individual party preferences*’ is, as hypothesised, dependent on spatial location and accompanying contextual characteristics and, of course, also individual characteristics. This indicator on general attachment towards Austrian parties is analysed for five of the six parties represented in parliament before (and after) the 2013 Austrian election; that is the

governing parties SPOe (Social Democratic Party of Austria) and OeVP (Austrian People's Party) and the opposition parties FPÖe (Freedom Party of Austria), the Greens, and Team Stronach, a party newly founded in 2012 by the Austrian-Canadian businessman Frank Stronach.²⁵

Individual party preferences are operationalised as consisting of two different concepts; first, the *likelihood to vote for a party in national elections* and second the *sympathy towards the party leaders and frontrunners* in the 2013 Austrian election. These two concepts had been separately measured in the AUTNES Online Panel Study (Kritzing et al., 2016a, 2016b) and will be combined into a joint measure in order to investigate contextual influence on individual party preferences.

The likelihood to ever vote for the parties contesting in the 2013 election was measured using the propensity to vote for each party (PTV, see van der Eijk, van der Brug, Kroh, & Franklin, 2006). These eleven-point metric variables had been included in every wave of the AUTNES Online Panel Study except for the fourth wave that is the post-election wave of 2013 (Kritzing et al., 2016a, 2016b). However, only variables from the first wave are used for operationalization to rule out campaign effects on propensities to ever vote for each party and sympathy towards the candidates. The question wording used in the first wave of the AUTNES Online Panel Study (and subsequent waves as well) reads as follows:

There are several parties in Austria, each of which would like to receive your vote. Using the scale of 0 to 10, how likely is it that you would **ever** vote for each of the following parties? (Kritzing et al., 2016c: 7)

Additionally, sympathy towards the party leaders was also included in the first three panel waves of this study. Sympathy was measured for every candidate (applying two separate questions; first the party leaders of SPOe, OeVP, and FPÖe were evaluated, then the party leaders of BZÖe, the Greens, and Team Stronach) using an 11-point scale ranging from 0 ('strongly dislike') to 10 ('strongly like'). The question wording reads as follows:

How much do you like the following politicians? And the following politicians?
(Kritzing et al., 2016c: 8)

²⁵ The Alliance for the Future of Austria (BZÖe) was excluded from analysis because of too many missing values on individual level which would have severely reduced the remaining observations. The New Austria and Liberal Forum (NEOS) had not been included in the first wave of these panel studies and, thus, has to be excluded from analysis even though this party entered the Austrian parliament in 2013 (see Jenny & Müller, 2014).

This second variable used for operationalisation, however, was also included in the first panel wave that had been carried out about six weeks before the election took place. Both variables, PTV and candidate sympathy, had been included equally weighted in the new outcome variable '*individual party preference*' and rescaled to keep the original scale ranging from 0 ('no preference for party') to 10 ('high preference for party'). This procedure was performed to keep a more intuitive scale that ranges from 0 to 10 instead of a combined (that is summarised) measure ranging from 0 to 20 that might cause confusion. Table 3 gives an overview of the dependent variables' descriptive statistics and those of its defining variables, which are PTV and candidate sympathy.

	Propensity to Vote	Candidate Sympathy	Party Preference
SPOe	4.35 (3.49)	3.96 (2.96)	4.15 (2.91)
OeVP	3.67 (3.29)	3.76 (2.73)	3.72 (2.70)
FPOe	2.85 (3.63)	3.03 (3.42)	2.94 (3.35)
Greens	3.64 (3.61)	3.87 (3.05)	3.76 (3.03)
Team Stronach	2.59 (3.14)	3.03 (3.42)	2.79 (2.60)

Table 3: Mean Values and Standard Deviations of Dependent Variable 'Individual Party Preference' and its Defining Variables

Table 4 shows the bivariate correlation coefficient Pearson's r for PTV and candidate sympathy. Additionally, scale reliability coefficients from Cronbach's Alpha calculation for the dependent variable '*individual party preference*' that consists of the two variables in question are also included in this table. Here, we see that correlation between PTV and candidate sympathy is quite high in general; the strongest correlation ($r=0.8$) can be found for FPOe and sympathy towards its party leader Heinz-Christian Strache while the lowest correlation can be found for Team Stronach and its eponymous leader Frank Stronach. However, even though Pearson's r for Team Stronach and Frank Stronach is 'only' about 0.26, the correlation is significant and still moderately strong.

The scale reliability coefficients are also fine for most variables with only one value below 0.7. That is, again, the value for Team Stronach which also has a rather low Pearson's r value. However, even though the values of the correlation coefficient and

the scale reliability coefficient are lower for that party than they are for the other parties, this party is still included in the analyses for the sake of completeness.

	Pearson's r	Scale Reliability Coefficient
SPOe	0.63***	0.76
OeVP	0.60***	0.74
FPOe	0.8***	0.89
Greens	0.66***	0.79
Team Stronach	0.26***	0.41

Table 4: Correlation and Reliability Coefficients of Outcome Variable and its Defining Variables (*) = $p < 0.001$**

4.3.2. Individual Level Data: Control Variables

The individual-level variables used throughout this thesis' analyses are mostly usual control variables in political science research which are known for their influence on political and voting behaviour in Austria (see Kritzinger, Müller, & Schönbach, 2014; Kritzinger et al., 2013). This applies namely to information on the respondents' gender, age, occupation, education, and union membership. Individual-level variables that are linked with substantial hypotheses and this thesis' research interest will be named and presented as such (see e.g. section 5.3.3).

Starting with the fundamental control variables of age and gender, we see that most respondents (52 per cent) are female. The respondents' mean age is 42.9 (standard deviation = 15.7), the median age is 43 years.

	Frequency	Percent
Male	1,418	47.92
Female	1,541	52.08
Total	2,959	100

Table 5: Frequency Distribution of Gender

Education is included using three categories; the first includes all respondents with only basic levels of education (ISCED levels 1 and 2). The second category includes respondents who finished secondary education (ISCED 3) while the third and highest category includes respondents who finished tertiary education or hold an academic degree. This variable is included as control variable since it is known that education influences the likelihood of voting for OeVP or the Greens on the one hand, and the likelihood of not voting for FPOe or SPOe on the other hand.

	Frequency	Percent
Basic Education	214	7.31
Secondary Education	2,086	71.24
Tertiary Education	628	21.45
Total	2,928	100

Table 6: Frequency Distribution of Education

Occupation is also included in the analyses using four different categories: The first category captures respondents who work (or used to work in case they are already retired) in the private sector as worker, employee, or independent contractor. In the second category respondents working in the public sector are included. The third category includes respondents working (or formerly working) as self-employed or farmer. In the fourth category, however, respondents who are still in education are included. This was necessary since the Austrian voting age is 16 and most 16 years old in Austria are still in education (and, thus, would not be captured by the survey questions on employment). Since these respondents would be missing without this additional category, the fourth category of occupation as being still in education was introduced.

However, occupation (and in this case also ‘still being in education’) is included in the analyses in order to control for its influence on political behaviour and political attitudes.

	Frequency	Percent
Private Sector	1,808	66.32
Public Sector	348	12.77
Self-Employed	261	9.57
In Education	309	11.34
Total	2,726	100

Table 7: Frequency Distribution of Occupation

Last, union membership is also included by applying a simply ‘yes-no’ question on whether respondents are union members or not. Here we see that this applies to about 23 per cent of all respondents. In general, union membership is an important indicator of the likelihood to vote for left and social democratic parties, and worker’s unions might also be important for campaigning of these parties. Since this is also associated with an impact on the voting behaviour of union members, this variable is again included as control variable for data analyses.

	Frequency	Percent
yes	653	22.78
no	2,213	77.22
Total	2,866	100

Table 8: Frequency Distribution of Union Membership

4.4. Regionalisation of Party Preferences

Since we know which variables from which dataset using which method will be analysed, it is time to have a closer look on that dependent variable and investigate how regionalised party preferences in Austria are. One way to do so is by setting up empty so-called ‘nullmodels’ to first find out *what is actually going on contextual level* and how much variance of the individual level dependent variable can be explained through higher-level variation? These models only include the dependent variable ‘individual party preferences’ without any other predictor variable(s) but take care of the clustering effect of shared political districts or regional constituencies.

One measure to answer the question of what is going on regarding regionalisation of party preferences is the intra-class correlation (ICC). The ICC can be interpreted as the proportion of the outcome variable’s variance that can be solely explained by level 2 variation. Thus, it ranges between 0 (0 per cent of variance explained on level 2) and 1 (100 per cent or all variance explained on level 2) and is a rather straightforward indicator of regionalisation (Hox, 2010).

Another way to evaluate the extent of regionalisation is to test whether multilevel models (that usually take a hierarchical data structure into account) are doing better than single-level regression models (that usually do not take a hierarchical data structure into account) would do. This can be done by looking at the results of deviance tests that are based on maximum likelihood estimation. The results of deviance test indicate how well the model is doing regarding the actual structure of data; the lower the deviance, the better the hierarchical level fits the data compared to a single-level regression model. Or put into other words: Deviance tests provide us with information about how well our model (that is usually up to the researcher to decide about) fits our data (that is usually not up to the researcher to decide about). (Hox, 2010). The results of these analyses for the aggregate level of PDs are presented in Table 9 (below).

	SPOe	OeVP	FPOe	Greens	Team Stronach
ICC	0.011	0.013	0.032	0.032	0.023
Deviance Chi ²	3.85	5.47	35.97	35.61	18.34
Chi ² p-value	0.025	0.010	<0.001	<0.001	<0.001

Table 9: Intra-class Correlations (ICC) and Deviance Statistics of individual political preferences (Political District Level)

By looking at Table 9 we see the amount of variance that can be explained through the respondents' location in PDs considerably varies by party – between 1 per cent (SPOe and OeVP) and 3 per cent (FPOe and the Greens) of variation in party preferences can be solely explained through grouping of respondents in PDs. Even though most variance in party preferences can be (as expected) explained through individual-level variables and differences between respondents, there still is something going on the contextual level of political districts that deserves further attention. Additionally, results of deviance tests that are also presented in that table indicate that a multilevel regression model will do significantly better than a 'regular' (single-level) regression model will do (accompanying p-values of the deviance tests are included in the bottom row of Table 9; we see that multilevel models fit significantly better for each and every party than single-level models would fit).

Additional graphical illustration showing the so-called 'caterpillar-plots' (that are plotted residuals against their rank order indicating how many political districts are significantly different from each other) can be found in the appendix (Figure 15 to Figure 19). Basically, they tell the same story of regionalisation of party preferences as the ICCs do. There are rather low levels of contextual influence regarding the coalition parties SPOe and OeVP while there is a larger amount of regional influence for the opposition parties FPOe, the Greens, and Team Stronach (with the latter showing a level of contextual influence between the governing and the opposition parties).

To find out what is going on the higher level of RCs, similar analyses are performed on that spatial level as well. However, it is important to note that the data structure and number of analytical levels remains the same. The only difference is that the level of clustering is now RCs instead of PD level. Results of these analyses are presented in Table 10 and Figure 20 to Figure 24 (see Appendix), respectively.

	SPOe	OeVP	FPOe	Greens	Team Stronach
ICC	0.000	0.008	0.021	0.022	0.011
Deviance Chi ²	0.00	5.27	28.37	26.46	9.26
Chi ² p-value	1.000	0.011	<0.001	<0.001	0.0012

Table 10: Intra-class Correlations (ICC) and Deviance Statistics of individual political preferences (Regional Constituency Level)

Comparing the results of Table 9 and Table 10 we see that the ICC drops for every party in the latter. This is most noticeable for SPOe where the small effect of clustering on PD level dropped to almost no clustering effect on RC level (this can also be seen in the corresponding caterpillar plot, see Figure 20 in Appendix). However, for every party the share of variance that can be explained by RC clustering is lower than the share of explained variance by PD clustering. Deviance tests still indicate that a multilevel model will do better than a single-level regression model (except for SPOe where no effect of RC on variances within the same RC can be observed).

This analysis of ICCs and deviance tests can also be performed after introducing a third level of analysis (and so variance is decomposed into individual level 1 variance, PD level 2 variance, and RC level 3 variance). In this table (see Table 11), results from Table 9 and Table 10 are summarised in order to provide an overview: In the first row labelled with 'ICC (RC)' we see the correlation of individual party preferences of respondents within the same RC. In the second row, this is presented for respondents that live in the same RC *and* PD. Additionally, deviance tests statistics and p-values are also presented.

	SPOe	OeVP	FPOe	Greens	Team Stronach
ICC (RC)	0.000	0.007	0.011	0.009	0.003
ICC (PD RC)	0.011	0.012	0.033	0.032	0.023
Deviance Chi ²	3.85	7.09	38.46	37.23	18.68
Chi ² p-value	0.146	0.029	<0.001	<0.001	<0.001

Table 11: Intra-class Correlations (ICC) and Deviance Statistics of individual political preferences (PDs nested within RCs)

Summing up the results of this first analysis, the ICCs suggest that contextual effects are stronger on PD level than on the level of RCs. However, even though two level (that is individual and PD level) models might be doing slightly better than three level models (that include individuals, PDs, and RCs), the analyses in the following chapters will be performed using three level models. This will be done since ICCs on

PD level are roughly the same no matter whether a three level model or a two level model is investigated. Thus, the influence of PDs will also be about the same while I still will be able to simultaneously investigate the impact of RCs (even though we already know from that analysis that the impact of RCs can be expected to be rather small). Additionally, we already know that the lion's share of variance in individual party preferences might be explained by individual-level characteristics instead of contextual variables, as it can be expected when the influence of macro-level factors on individual-level characteristics is investigated.²⁶

After this study's research question, research design, and main concepts had been presented and discussed, it is time to have a closer look on contextual effects resulting from different spatial phenomena. This means that the influence of the economic context, the social context, and the media context will be separately conceptualised, analysed, and discussed in the following three chapters. Each of the analytical chapters starts with a short but context specific introduction to economic, social, or media contextual influence respectively. This is followed by context specific hypotheses and an overview on the contextual data used for the analysis in question.

The specific contextual variables used in each chapter will be presented in detail in the corresponding chapter. This also includes their source and necessary data preparation before data analysis. However, unless stated otherwise, the outcome variable 'individual party preferences' will remain the same as well as individual-level control variables do.

After data analysis of various contextual effects, each chapter ends with a summary and discussion of results. The analyses of economic, social, and media context, are followed by an overall conclusion based on the analyses' results.

²⁶ Since influence since this outcome variable of individual level party preferences will be the same for both the analysis of the economic context (see next chapter 5) and the analysis of the social context (see chapter 6), this first analysis of the spatial distribution of the outcome variable applies to both types of context.

5. The Economic Context

The impact of a nation's economic performance on political behaviour and the outcome of elections are often studied in the framework of the well-known 'economic voting' or 'performance voting' approach. One main assumption of this theory on political behaviour is that voters hold parties accountable for economic performance: They punish bad economic performance and reward satisfying economic performance by supporting either opposition parties (in the first case) or governing parties (in the second case) (Duch & Stevenson, 2008; Key, 1966; Lewis-Beck & Paldam, 2000). They do so because economic policies are not only one of the most important fields of government activities but can also be seen as an useful heuristic: Instead of reading hundreds of pages of party programmes and investing lots of time to gather information on political facts, candidates, or parties and their record, voters simply have to ask themselves if they think that their jobs are save, if they are able to pay back their loans or if they have the feeling that the economy is doing well in general (Ron Johnston & Pattie, 2006).

Governments and parties that can satisfy voters' expectations must be doing a good job, even if voters do not know what the government exactly does. Therefore, following this theory's assumptions and implications, voters cast their ballots in accordance with their evaluations of the economic situation. In this chapter, it will be sketched out and analysed how the economic context might influence individual political behaviour to answer the research question *what is the impact of the economic context on individual party preferences?*

However, since this study in general investigates contextual effects and this chapter in specific investigates the influence of the economic context on political behaviour, this chapter's research question is *how voters react to spatially contingent information and states of the economy*, and *who is especially responsive to the local economic context?* Thus, the underlying assumption of this analysis is that the state of the economy is not the same across places; instead, the economy can perform very differently in different regions and places (see section 5.2).

This analysis starts with a short overview on how voters might take information about the state of the economy into account and what information they actually receive. This is followed by a summary of how voters react to spatially different economic performance before I will turn to the actual data analysis.

5.1. Economic Performance and Voting

As already mentioned, ‘economic voting’ or ‘performance voting’ theory assumes that voters evaluate the state of the economy and base their vote choices on these evaluations (Duch & Stevenson, 2008; Key, 1966; Lewis-Beck & Paldam, 2000). However, this theory mostly operates on the individual level and, thus, is often solely based on individual *perceptions of the economy* instead of actual economic facts and figures. In this study, the impact of the economic context is investigated which also means that we do not have to rely on individual perceptions but rather that we can check regional economic performance and investigate its impact on individuals. But what do these individuals know about the economy? And how does political science research usually deal with actual economic facts? This will be sketched out on the following pages.

So, the question is what aspects of the economy are voters taking into account when evaluating the economic situation and – even more important – what facts do they actually know about the state of the economy? Some research shows that people are only aware of a few aspects of the economic situation, e.g. Paldam and Nannestad (2000) show that Danish voters have good knowledge about unemployment but only limited knowledge about inflation. However, Sanders (2000) argues that even though voters might have very vague knowledge on specific economic facts and figures, their general sense of economic development and the state of the economy is sufficient enough to be taken into account when it comes to elections and evaluations of parties’ performance. Additionally, by assuming voters to be rather sociotropic than egotropic (Lewis-Beck & Paldam, 2000) and, thus, to care more about others than their own pocket, contextual influence is introduced through the backdoor in performance voting theory: One can assume that most of the others about which people care do live in the same spatial context, experience the same regional economic circumstances, and interact regularly with each other. Thus, if voters assume that these others are doing badly, they might also evaluate the regional economy in the same way.

But economic performance and economic development are also important factors in another string of theory and empirical application of political science: Objective macroeconomic indicators about the state of the economy are also used in election forecasting models and help to ‘predict’ the outcome of elections. Important macroeconomic variables in election forecasting are (among others) unemployment

growth and inflation, implying that these (and other) variables have an impact on the probability of parties or candidates to win an election (Aichholzer & Willmann, 2014; Leigh, 2005; on the importance of these indicators in economic voting theory see also Lewis-Beck & Paldam, 2000).

Since these two variables are doing rather well in forecasting models, one can assume that they influence people's voting behaviour by being considered when it comes to the evaluation of the economic situation. However, some studies also use other macroeconomic variables in election forecasting models such as changes in the GDP and mean income (e.g. Neck & Karbuz, 1997) or the number of new jobs created (e.g. Lewis-Beck & Tien, 2005, 2008) and, thus, imply that these factors are also related to evaluations of the economy.

Summing up, voters react to past events and developments of the economy and evaluate the state of the economy using this information before going to the ballot box (Lewis-Beck & Paldam, 2000). Thus, economic performance has an impact on political behaviour and election outcomes. Economic performance, however, is often only regarded as *national economic performance*, even though the economy is not the same across a whole nation. In fact, the economy is spatially different in most cases.

5.2. It's the Economy – But Which One?

Economic prosperity and economic development are not equally distributed across places. As some countries in Europe are facing more and different economic challenges than other countries, the same applies also for regions within a given country on a smaller scale: Some regions are doing well while other regions are doing badly; this can be observed for unemployment, new jobs created, mean incomes...etc. (on regional differences in GDP see Eurostat, 2016; Storper, 1997).

To be specific: Some regions might be specialised in one economic branch and will be more affected by economic crises or the transition to service economy than others. However, these regions might also be more prospering and doing better in times of high demand for certain goods that are produced in these regions. On the other hand, some regions are more diversified and might be less affected by economic crises but also by booming branches and high demand (Coe, Kelly, & Yeung, 2013; Palme & Musil, 2012).

This spatial variation of economic performance and the state of the economy across place can also be referred to as a voter's *economic context*; that is her areally defined environment with its place specific economy and characteristics (J. Books & Prysby, 1999). The unequal distribution of economic performance – the economic context – also has consequences on political behaviour: Ron Johnston and Pattie (2006) show that living in an area with a strong decrease in the level of unemployment increased the likelihood to vote for Labour in 2005, indicating that the contextual influence that they already found in Ron Johnston et al. (2005) might be operating at various elections and is not only accurate for British elections in the 1990s. Similar effects had also be identified in one of the few studies that investigate contextual influence in Continental Europe: The higher the local level of unemployment was the more likely was support for the (then non-incumbent) Social Democrats in the 1994 German elections (Pickery, 2002). So, we already see that there is evidence that objective macroeconomic indicators do influence individual political behaviour when it comes to elections.

But parties' success at the ballot box is not the only thing that is influenced by the evaluation of the local economy and the economic context. R. J. Johnston and Pattie (2001) show that the respondents' evaluation of the local economy not only influences their vote choice, but also that effects resulting from evaluations of the national economy become insignificant once the state of the regional economy is considered. Similar effects had also been found in Ron Johnston et al. (2000) or J. Books and Prysby (1999). Additionally, Bisgaard and Sønderskov (2016) show that respondents rely on their very close spatial environment and its unemployment rate when it comes to evaluations of the national economy. Thus, the state of the regional economy (or its evaluation) does also influence and moderate other associations.

Following the assumption that people know about the state of the economy and taking into account that economic performance is not the same across space, one can assume that different voters also receive different information about the state of the economy: The cues they receive on economic performance depend on where they live, with whom they interact, and what they read and see in the news (J. W. Books & Prysby, 1991; Burbank, 1995a, 1995b, 1997; see also Rogers, 2014). This spatially contingent information is then considered when it comes to the evaluation of parties. Consequently, evaluations of economic performance should also be dependent on voters' locations (see section 2.2). However, Rogers (2014) shows that bad local

economic development does negatively influence respondents' perceptions of the economy on the local level; which then in turn lowers approval of officials on *all* governmental levels.²⁷

Economic development is place specific and so is its impact on voters: Research shows that place specific economic development influences retrospective evaluations of the national economy (J. Books & Prysby, 1999) and that voters combine evaluations of their personal economic situation with contextual information in order to evaluate the national economy and its development (Weatherford, 1983). Therefore, voters not only receive different information about the state of the local economy depending on where they live. Moreover, this information also influences their evaluations of the economy on the larger scale of the nation.

But voters are also surprisingly good in receiving accurate information about the local economy. Newman et al. (2013) show that objective contextual indicators on local unemployment do in fact predict respondents' evaluations of the local labour market. So people not only have knowledge about the national unemployment rate (Paldam & Nannestad, 2000) but also have at least a feeling for the extent of unemployment at the places where they are actually living. Conclusively, the place specific economic context matters since people know about it; and this knowledge about the economic context overshadows also general economy evaluations sometimes.

5.3. Data and Hypotheses on the Economic Context

Next, the hypotheses regarding the economic context and its impact will be presented. The first hypotheses deal with higher-level influencing factors, then some lower-level hypotheses will be discussed.²⁸ This will be followed by a more detailed overview on and discussion of the contextual variables used in this analysis. Then, the individual-level variables of this analysis that are not control variables will also be discussed.²⁹

5.3.1. Hypotheses

The first hypotheses are in line with the assumption of 'economic voting' or 'performance voting' theory that proposes that voters punish bad economic

²⁷ Thus, sociotropic voting (that is voting rather for other's wellbeing than for one's own) can also operate on a lower level.

²⁸ However, this unusual order of hypotheses results from the focus of this study that is the impact of contextual influence instead of individual characteristics.

²⁹ For presentation and discussion of sociodemographic control variables see section 4.3.2.

performance and reward good economic policies by voting either for governing or opposition parties (Lewis-Beck & Paldam, 2000). However, since actual vote choice is not included in the construction of the dependent variable, it is hypothesised that voters' general party preference (the propensity to ever vote for that party measured in the first panel wave combined with sympathy towards the party leaders, see section 4.3.1) is influenced by the local economic context. So, the dependent variable of this study that is individual party preferences more or less acts as a proxy for actual vote choice and, thus, can be linked to economic voting theory.

The local economic performance, however, is operationalised through local macroeconomic indicators. Thus, these hypotheses do not target the *perception of the economy* (no matter whether it is national or regional) but *actual economic performance* as it is reported in official statistics, the media, or by politicians. Good economic performance can mean many things. In this analysis, a higher than average increase in incomes, low unemployment, few self-employed earning less than 11,000 Euro, and low rises of housing prices are defined as a 'good' economic performance (see below for further discussion of these variables). Thus, variables on unemployment, self-employed with incomes below 11,000 Euro, and housing prices should have a *negative* impact on preferences towards SPOe and OeVP while the variable on aggregate incomes should *positively* influence party preferences for the two governing parties.

To answer the research questions on the influence of the economic context, the following hypotheses act as a starting point:

H1a: The preference for governing parties (SPOe and OeVP) is higher the better contextual economic performance is.

H1b: The preference for opposition parties (FPOe, the Greens, and Team Stronach) is lower the better contextual economic performance is.

In Austrian grand-coalition governments, the Social Democratic SPOe and conservative OeVP are usually cooperating. Nevertheless, even though these two ideological different parties must decide in cooperation what policies they want to implement, each party has a different emphasis that is based on their tradition and history. This different emphasis of different parties had also been described as 'issue ownership' of parties or candidates (see Petrocik, 1996; van der Brug, 2004).

SPOe, as a Social Democratic party, has a genuine interest to create jobs. Thus, high unemployment rates are not satisfying for this party, especially since this party holds the Ministry for Labour, Social Affairs and Consumer Protection with its minister Rudolf Hundstorfer as of the time of the election. Similar applies for self-employed who do not earn enough money to pay income tax in Austria, which is less than 11,000 Euro per year in Austria at the moment. Even though self-employed are not the most important group of voters for SPOe, the party still emphasises the importance of decent incomes for all voters no matter whether they are employees, workers, or (as in this case) self-employed.³⁰

Regarding OeVP, as a conservative party they stress the need of a low inflation rate and decent incomes for the employed: One of the main campaign messages of OeVP in the last years was that hard work must pay off. So, an above average increase in incomes should be good for the conservative OeVP. This leads to the hypotheses that...

H2a: The impact of unemployment and self-employed earning less than 11,000 Euro is stronger for SPOe than it is for OeVP.

H2b: The impact of housing prices and incomes is stronger for OeVP than it is for SPOe.

Another important point targets the 'contextual linkage' of voter or the number of years they already lived in the same context: Voters living in a geographic context for many years should be more aware of its economic performance than voters who just moved recently to this PD. They experienced economic change and economic crises over many years, saw businesses developing and shutting down, know about others who started their professional career in this context...etc. To sum up, the longer a voter already lived at her spatial context, the more information about the contextual economy and development of the economy she aggregated over the years. Thus, a cross-level interaction between individual contextual linkage (that is operationalised as the number of years a voter lives in her political district) and aggregate variables is expected: The stronger contextual linkage is, the stronger the aggregate variables' influence should be since economic performance can be better assessed. Thus, it is hypothesised that context influences different people differently; in fact, ...

³⁰ However, we must also keep in mind that not all people categorised as self-employed are actual self-employed in the true sense of the word. Instead, some of them might actually be misclassified employees.

H3: Contextual linkage moderates the influence of local economic performance; the longer a person lives in her PD the stronger gets the impact of local economic indicators on party preference.

According to ‘economic voting’ theory, voters reward or punish governing parties based on their evaluation of the national economy. However, since voters do not (or hardly) have first-hand perception of the national economy but rather the local economy, it is hypothesised that the mechanisms operating on national level can also be observed on the regional level. This will be investigated by analysing the individual-level impact of evaluations of local and national economic performance. However, we should keep in mind that these hypotheses are not strictly contextual but still include the *perceptions* of the economy (regardless of whether the regional or national economic performance is meant). So, the fourth set of hypotheses targets individual-level hypotheses but is still useful for the investigation of economic contextual influence:

H4a: The preference for governing parties (SPOe and OeVP) is lower the worse the perception of local economic performance is.

H4b: The preference for governing parties (SPOe and OeVP) is lower the worse the perception of national economic performance is.

5.3.2. Economic Contextual Data

Based on the research using election forecasting models or applying economic voting models, we can assess which contextual economic indicators might be relevant for individual political behaviour. Lewis-Beck and Paldam (2000) provide a useful starting point for choosing appropriate indicators of local economic performance by naming *inflation* and *unemployment* as the most important macroeconomic variables in economic voting. Thus, information on these two indicators and their contextual variation should be included in the analysis.

Additionally, the *development of incomes* is, besides inflation and unemployment, also named as an important factor in election forecasting by Neck and Karbuz (1997). Thus, information on incomes should also be included in such an analysis. Another economic contextual variable that I want to include in the analysis is the *share of self-employed who earn less than 11.000 Euro per year*. These self-employed do not have to pay any income tax since their incomes are too low to be taxed in Austria. With earning less than 11,000 Euro for working as self-employed, they can be regarded as

so-called ‘working poor’ – a rather unfavourable economic phenomenon. Thus, this variable can also be used as an indicator for an unsatisfying state of the regional economy especially regarding new businesses and jobs.

In most of these cases rather the *change of the aggregate variables* should be included in the analyses instead of static measures on these aggregate characteristics. By doing so, one would not run into danger of reproducing long existing regional disparities between different regions in Austria: While some regions have a tradition of comparatively high unemployment rates and low average incomes for decades, the development of the labour market and incomes (but also other contextual indicators) can still be very different and spatially contingent.

Aggregate information on unemployment, price changes in housing (used as a proxy measure for regional inflation, see below), incomes of self-employed, and change in incomes had been obtained from different data sources. Information about net incomes (of both employed and self-employed) is provided by the national statistical office *Statistics Austria*. However, to conduct this statistical analysis of contextual influence on PD and RC level low-level data is needed but is not provided by *Statistics Austria* since this information is only available at the nation or federal state level.

Instead, low-level regional data on the development of incomes is provided by the *Austrian Economic Chambers (Wirtschaftskammer Österreich)* who edit the *Statistics Austria* data in order to be able to report it on PD level, and annually publish information on mean regional incomes on their homepage (WIRTSCHAFTSKAMMER ÖSTERREICH, 2008, 2012). This data had then been collected, edited, and used by myself to include information on regional incomes in the analyses on economic contextual impact.

Similar also applies to the incomes of self-employed: Information on incomes is also usually provided by *Statistics Austria*, however, such low-level information on a very specific topic is hard to find and only seldom available. This is also the case for this information: Even though *Statistics Austria* reports this data on higher levels usually free of charge, it has to be paid for appropriate low-level data.

So this information had been retrieved from an online map provided and hosted by the online newspaper *derstandard.at* (Hametner, 2015). This data had then again been collected and edited by myself to be included in the analyses. Even though this

map is published by the online newspaper *derstandard.at*, the information it contains still is provided by *Statistics Austria* (as it is also the case regarding the information on mean incomes and the *Austrian Economic Chambers*).

Information on unemployment was derived from the national labour bureau *Arbeitsmarkt Service (AMS)* and its online database. Unfortunately, the national labour bureau AMS uses another form of regionalisation that is different than the PD or any other regionalisation used in Austria for administrative purposes: This regionalisation contains of so-called ‘*Arbeitsmarktbezirke*’ (that is labour market districts) which sometimes exactly correspond to other administrative units such as PDs while they sometimes do not. Therefore, this data structure is sometimes cross-classified so that respondents living in different PDs have sometimes the same value on aggregate unemployment; even though this mostly applies to respondents living in Vienna where, instead of 23 municipality districts, only twelve *Arbeitsmarktbezirke* are used.

Since the Austrian national elections took place at the end of September 2013, the change of unemployment between September 2012 and September 2013 is included in the analyses. Additionally, to rule out short-term effects of the labour market, the change of annual averages of unemployment from 2012 to 2013 is included as well. Data on the labour market and its development is provided online by the AMS but has to be separately requested for each and every federal state and its *Arbeitsmarktbezirke* (Arbeitsmarktservice Österreich, 2016). Again, this data had then been combined and edited by myself to get a joint dataset on regional unemployment that can then be included in the analyses.

Inflation cannot be (or is hardly) reported on local level and, therefore, a proxy measure for the local level of inflation is needed. Such a proxy measure can be found in the change of housing prices that is available on the local level of PDs in Austria. Thus, change in housing prices is used as contextual proxy measure for regional inflation.

Information on the change of local housing prices was collected from the database provided by the webpage *immopreise.at* that collects advertisements and housing prices in the national newspaper *Der Standard* (immopreise.at, 2016). The proxy measure used for estimating regional inflation is the change of the average square meter housing prices between the fourth quarter 2012 and the fourth quarter 2013. However, this might be a quite rough proxy measure since only one way of

advertising is included and there might be too few advertisements in some PDs sometimes. Though, it might do its job to have at least a first look on the impact of regional inflation on party preferences.

Before including these contextual variables in statistical models, all values had been centred on their grand mean. By doing so, negative values indicate below average economic development (or a below average condition of the regional economy) while positive values indicate above average economic development (or condition of the regional economy). By doing so, these variables can be included in the statistical models with a meaningful neutral point of 0 (that indicates an average state of the economy).

Additionally, change in net incomes and price changes in housing were rescaled and are included in the analysis as ‘change in 100 Euros’. This had been done to obtain more meaningful results instead of tiny coefficients due to the scaling of variables. Table 12 below gives an overview on the aggregate variables used in this study, the corresponding data source and the period or point in time of its measurement.

Variable	Source	Time
Unemployment Change (I)	Arbeitsmarkt Service	September 2012 to 2013
Unemployment Change (II)	Arbeitsmarkt Service	2012 to 2011 (Annual Average)
Share of Self-Employed <11.000 €/Year	Statistics Austria	2012
Change in Net-Incomes	Statistics Austria	2008 to 2012
Price Change in Housing	immopreise.at	4th Quarter 2012 to 2013

Table 12: Economic Contextual Variables

5.3.3. Individual Level Data

The individual-level variables used in this analysis (and the following analyses as well) are in most cases usual standard control variables in political science research; gender, education, occupation, union membership, and age. These variables had already been presented and discussed earlier.³¹ In short, they are known for their influence on voting behaviour in one way or the other: While the electorate of SPOe and OeVP tends to be older, voters of FPÖe and the Greens are usually younger. Union membership is an important indicator of SPOe voting and sympathy towards the SPOe, while education splits the electorate between FPÖe and SPOe voters on the one side and OeVP and voters of the Greens on the other side.

³¹ For presentation and discussion of sociodemographic control variables see section 4.3.2.

However, there are also three individual predictor variables in this investigation of economic contextual influence that are not solely controls and, thus, should be given more attention. First, *perception of the national economy* and its change is not only included as control variable but rather an actual predictor variable since crucial influence of this evaluation is assumed in the economic voting framework. Perception of the national economy was measured by asking respondents to evaluate the current state of the economy compared to its state three years ago using a five-point Likert-scale. Categories range from ‘much worse’, ‘somewhat worse’ to ‘about the same’ and ‘somewhat better’ or ‘much better’. The question wording reads as follows:

What would you say: How has the economic situation in Austria changed **over the past three years**? Has it...(Kritzinger et al., 2016c: 14)

Second, *perception of the local economy* is also included in the analysis. In this survey question, respondents were asked to evaluate the state of the regional economy by comparing it to the rest of Austria. Like the five-point Likert-scale on national economic performance, respondents could choose between much better/worse, somewhat better/worse and about the same as in the rest of Austria:

How would you assess the state of economy in your region compared to other parts of Austria? Is the state of the economy in your region compared to the rest of Austria...(Kritzinger et al., 2016c: 15)

	National Economy	Local Economy
much worse	16.13	10.46
somewhat worse	34.08	17.86
about the same	31.32	38.46
somewhat better	18.02	28.28
much better	0.45	4.95
N	2,864	2,850

Table 13 Perception of the National and Regional Economy

Looking at the descriptive tables of these two variables (Table 13) we see that respondents were rather pessimistic in their views on the national economy: About 50 per cent said that the state of the economy got (much or somewhat) worse. However, only around 28 per cent of the respondents said that the state of the economy in their region is (much or somewhat) worse than in the rest of Austria.

Regarding the state of the local economy, most respondents think that their region is doing ‘about the same’ as the rest of Austria and, thus, do not think that their region is doing especially good or bad. Looking at the correlation between both evaluations we see that these two statements are not completely independent from each other but are in fact rather strongly correlated ($\chi^2 = 547.26$, $p < 0.001$, $\text{Tau}(b) = 0.31$).

Third, a proxy measure on ‘*contextual linkage*’ that can be used as a rough indicator of knowledge about and identification with one’s home region is needed to test the third hypotheses and its cross-level interaction. Such a proxy variable can be found in the time in years that the respondents already lived in their political district as of the time of the interview. The longer a respondent already lives in her PD, the stronger her contextual linkage to that PD should be. This variable on contextual linkage ranges from 0 years to 74 years with a mean value of about 22 years (standard deviation=17.26).

5.4. Data Analyses and Results

The research question and hypotheses will be answered using linear multilevel regression models; all analyses were conducted using Stata 13 and maximum-likelihood estimation.³² Contextual influence is going to be separately investigated for every party, thus, five multilevel regression models (with five party specific dependent variables; the preference towards the party in question) must be set up first. This had been done since I want to investigate party preferences towards every party represented in the Austrian parliament. Thus, a simple dummy variable that indicates whether respondents voted for a governing or opposition party (or prefer governing parties over opposition parties) would not be suited for this kind of analysis. Additionally, since the hypotheses also target preferences towards different parties, different models and dependent variables are also needed. Then the models are stepwise extended by including more predictor variables in the fixed part of the models to answer the research question and hypotheses.

I decided to set up four models for each party and, thus, investigate economic contextual influence in four steps. In the first model, only individual-level control variables are included (Model 0); that is gender, age, education, occupation, and union membership. Next, perceptions of both the local and the national economy are

³² See section on multilevel analysis 4.2.

included for investigating the influence of these two variables on party preferences and to answer H3a and H3b (Model 1). Third, direct level 2 effects of economic indicators on party preferences are investigated by including aggregate variables on unemployment, change in net incomes, share of self-employed who earn less than 11,000 Euro per year, and change in housing prices (Model 2). Finally, cross-level interaction effects of aggregate variables with the respondents' contextual linkage are included while still controlling for individual and direct cross-level effects (Model 3). This will be done to investigate whether respondents living for many years in their PD are more responsive to contextual information than respondents who do not.

The models were set up as three-level models with respondents nested within PDs that are nested within RCs. By doing so, I can decompose the variance structure into the three levels of interest; that is between RC variance, within RC between PD variance, and within PD between respondent variance. The results of the variance decomposition are presented in the random effects part of the corresponding tables and will be discussed after the fixed effects part of each model.

5.4.1. Individual Level Influence on Party Preferences

Setting up individual-level models for each party using only the *control variables* of these analyses reveals usual and expected results and patterns of sociodemographic characteristics in Austrian political and voting behaviour (see Kritzinger et al., 2014; Kritzinger et al., 2013): Gender and education are especially important regarding favouring FPÖ or the Greens, while education, occupation, and union membership is important for preferences towards ÖVP or SPÖ.

However, since these variables are only used as controls without any hypothesis attached (apart from being relevant regarding party preferences), the results will not be discussed in detail. Instead, the results of Model 1 including perceptions of the economy will be presented in more detail (see Table 16).

	SPOe	OeVP	FPOe	Greens	TeamS
Gender (ref. cat.: male)	0.0822 (0.116)	0.150 (0.108)	-0.272* (0.130)	0.508*** (0.118)	-0.255* (0.103)
Age	0.0214*** (0.00436)	0.00118 (0.00409)	-0.0258*** (0.00492)	-0.00444 (0.00446)	-0.0123** (0.00389)
Edu: finished secondary education (ref. cat.: up to secondary education)	0.0328 (0.248)	0.614** (0.234)	-0.687* (0.276)	0.493* (0.251)	-0.482* (0.219)
Edu: higher education (ref. cat.: up to secondary education)	0.101 (0.267)	1.105*** (0.253)	-2.130*** (0.299)	1.998*** (0.272)	-1.586*** (0.237)
Union Membership (ref. cat.: yes)	-0.771*** (0.140)	0.428** (0.131)	0.00336 (0.158)	0.0824 (0.142)	0.156 (0.125)
Occupation: civil servant (ref. cat.: employee)	-0.0568 (0.181)	0.0110 (0.170)	0.376+ (0.205)	-0.425* (0.184)	0.128 (0.162)
Occupation: self employed (ref. cat.: employee)	-0.965*** (0.202)	0.301 (0.188)	-0.124 (0.227)	-0.560** (0.205)	0.0896 (0.179)
Occupation: in education (ref. cat.: employee)	0.825*** (0.212)	0.473* (0.201)	-1.442*** (0.239)	1.212*** (0.221)	-0.934*** (0.190)
Constant	3.723*** (0.338)	2.536*** (0.323)	5.240*** (0.384)	2.874*** (0.351)	4.125*** (0.302)
Var (RC)	7.78E-12 (0.000000 0000612)	0.043461 (0.0465566)	0.0604103 (0.0778525)	0.0903522 (0.0757471)	0.0011391 (0.0181933)
Var (RC PD)	0.083937 (0.0646645)	0.0665701 (0.067454)	0.1989998 (0.1082629)	0.1414434 (0.0857669)	0.1003586 (0.0588971)
Var (residual)	8.138801 (0.2334793)	6.995708 (0.2021643)	10.23056 (0.2925913)	8.240346 (0.2374541)	6.360458 (0.1833655)
N	2534	2492	2535	2494	2508

Standard errors in parentheses
+p<0.1 * p<0.05 ** p<0.01 *** p<0.001

Table 14: Influence of Control Variables - Model (o)

However, after this first analysis we can evaluate whether the multilevel model is appropriate; or put into other words whether it does a better job than a single-level regression model. By looking at the results of this first analysis, we can see that this is actually the case: Table 15 shows the results of Likelihood-Ratio Tests comparing the hierarchical models with single-level models: Except for SPOe (with a p-value of 0.25), preferences for every other party are estimated significantly better using a hierarchical approach than a single-level regression model.

	SPOe	OeVP	FPOe	Greens	TeamS
Chi ²	2.73	8.1	16.86	21.64	6.21
p-value	0.2555	0.0174	<0.001	<0.001	0.0448

Table 15: Likelihood-Ratio Tests - Model (o)

After including the *perceptions of the economy* (see Table 16 next page), we see that an unfavourable perception of the national economic performance is negatively

associated with party preferences for the governing parties SPOe and OeVP as well as the Greens while being positively correlated with party preferences towards the two right-wing populist parties FPOe and Team Stronach: In case the national economy is perceived as much worse than three years ago, party preferences for the governing parties and the Greens are lower compared to respondents who think that the state of the economy stayed about the same (the reference category). However, regarding respondents who evaluate the national economy as somewhat worse than three years ago, the effects get weaker but are still in the same direction as reported above (even though the effect for Team Stronach vanishes).

Similar trends but the other way around can be observed for favourable evaluations of the national economy, even though the associations are not as clear as for unfavourable evaluations: Preference for SPOe seems to not be positively affected by favourable evaluations of the national economy while there is a positive effect for the other coalition party OeVP regarding evaluations of the economy as ‘somewhat better’ than three years ago. In turn, evaluating the national economy as ‘somewhat better’ than three years ago has a significant negative effect on preferences for FPOe and Team Stronach. Additionally, evaluations of the economy as ‘much better’ lead to a strong positive effect for OeVP, but for the opposition party FPOe as well.³³ The left-wing opposition party the Greens seems to be not affected at all by positive evaluations of the national economy.

³³ However, as we see in Table 2 there are only very few respondents (0.45 per cent of the whole sample) who evaluate the state of the economy as ‘much better’ than three years ago. So, this finding might be based on a very small number of observations.

Controls	SPOe	OeVP	FPOe	Greens	TeamS
Gender (ref. cat.: male)	0.203+ (0.116)	0.249* (0.107)	-0.425** (0.131)	0.606*** (0.117)	-0.357*** (0.104)
Age	0.0221*** (0.00436)	0.00129 (0.00405)	-0.0260*** (0.00494)	-0.00404 (0.00445)	-0.0124** (0.00393)
Edu: finished secondary education (ref. cat.: up to secondary education)	-0.0186 (0.246)	0.544* (0.228)	-0.555* (0.276)	0.444+ (0.247)	-0.362+ (0.220)
Edu: higher education (ref. cat.: up to secondary education)	-0.0785 (0.267)	0.884*** (0.248)	-1.806*** (0.301)	1.769*** (0.269)	-1.340*** (0.239)
Union Membership (ref. cat.: yes)	-0.769*** (0.139)	0.457*** (0.129)	0.0614 (0.158)	0.0933 (0.141)	0.183 (0.125)
Occupation: civil servant (ref. cat.: employee)	-0.0249 (0.179)	0.0431 (0.166)	0.311 (0.203)	-0.381* (0.181)	0.0774 (0.162)
Occupation: self employed (ref. cat.: employee)	-0.947*** (0.203)	0.283 (0.186)	-0.128 (0.228)	-0.536** (0.204)	0.101 (0.181)
Occupation: in education (ref. cat.: employee)	0.714*** (0.216)	0.393+ (0.201)	-1.250*** (0.244)	1.086*** (0.223)	-0.785*** (0.195)
<i>Economy Perceptions</i>					
Nat.Eco.: much worse (ref.cat.: about the same)	-1.452*** (0.186)	-1.214*** (0.173)	1.489*** (0.211)	-1.587*** (0.190)	1.061*** (0.168)
Nat.Eco. somewhat worse (ref.cat.: about the same)	-0.569*** (0.143)	-0.221+ (0.133)	0.708*** (0.162)	-0.529*** (0.145)	0.410** (0.129)
Nat.Eco.: somewhat better (ref.cat.: about the same)	0.215 (0.167)	0.542*** (0.154)	-0.431* (0.189)	-0.00449 (0.169)	-0.305* (0.149)
Nat.Eco.: much better (ref.cat.: about the same)	0.236 (0.895)	1.442+ (0.822)	1.708+ (1.011)	0.346 (1.005)	0.613 (0.799)
Loc.Eco.: much worse (ref.cat.: about the same)	-0.225 (0.215)	-0.393* (0.200)	-0.0286 (0.246)	-0.0476 (0.223)	-0.298 (0.193)
Loc.Eco.: somewhat worse (ref.cat.: about the same)	0.239 (0.166)	0.320* (0.155)	-0.0958 (0.188)	0.409* (0.170)	-0.188 (0.149)
Loc.Eco.: somewhat better (ref.cat.: about the same)	0.391** (0.142)	0.546*** (0.131)	-0.350* (0.161)	0.617*** (0.145)	-0.348** (0.128)
Loc.Eco.: much better (ref.cat.: about the same)	0.0400 (0.278)	0.359 (0.256)	-0.752* (0.314)	0.921** (0.283)	-0.455+ (0.247)
Constant	3.957*** (0.355)	2.539*** (0.331)	4.884*** (0.404)	3.023*** (0.364)	3.969*** (0.319)
Var (RC)	9.08e-12 (5.82e-11)	0.0263066 (0.0433363)	0.1064349 (0.0893386)	0.120946 (0.0903251)	4.74e-10 (3.45e-09)
Var (RC PD)	0.0834764 (0.0638716)	0.0611235 (0.0665707)	.1585567 (0.1043033)	0.1481264 (0.0941404)	0.1161629 (0.0576452)
Var (residual)	7.756404 (0.2273049)	6.53739 (0.1925598)	9.819254 (0.2867974)	7.804789 (0.2295875)	6.154809 (0.1811804)
N	2435	2401	2436	2403	2412
Standarderrors in parentheses +p<0.1 * p<0.05 ** p<0.01 *** p<0.001					

Table 16: Influence of Economy Perceptions - Model (1)

Turning to the *local economy*, we see that evaluating the local economy as much worse than the economy of the rest of Austria lowers party preferences for OeVP (but not the preferences for SPOe) but has no effect at all on party preferences for opposition parties (compared to evaluations of the local economy as ‘about the same’ as the rest of Austria, the reference category). Surprisingly, evaluating the local

economy as only 'somewhat worse' than the rest of Austria shows that party preferences for OeVP and the Greens significantly increase on average but has no effect on the right-wing opposition parties or the governing SPOe. This is somewhat unexpected since there were comparatively strong positive effects of perceiving the national economy as somewhat worse for the right-wing opposition parties. Additionally, while saying that the national economy is somewhat worse has a negative impact on OeVP preferences, the effect of a somewhat worse regional economy on OeVP preferences is now significantly positive.

Evaluations of the local economy as 'somewhat better' show the most effects on party preferences; in case respondents think that their region is doing somewhat better than the rest of Austria, party preferences significantly increase for SPOe, OeVP, and the Greens while they significantly decrease for FPÖ and Team Stronach. However, looking at the effect of a local economy that is doing 'much better' than the economy in the rest of Austria only shows effects on party preference for the opposition parties: There is a significant positive effect regarding the Greens and negative effects for FPÖ and Team Stronach. The governing grand coalition parties SPOe and OeVP are not affected at all by an evaluation of the local economy as 'much better' than the rest of Austria.

One possible explanation for the negative effects of good local economic performance on the right-wing opposition could be found in the economic voting assumptions: If you think the local economy is doing well (and, thus, you do not really have to worry about your job or about the wealth of the ones you love), you might not *directly* reward the national government, but you do not vote for the right-wing opposition either. Instead, you could turn to the post-materialistic Greens (Tranter & Western, 2009).

Summing up these first results on the effects of economic perceptions, one could state that they are not exactly in line with economic voting theory as it had been sketched out at the beginning of this chapter: While it looks like that the governing parties suffer from unfavourable evaluations and increase their preference of voters with favourable evaluations of the economy, the same also holds true for the opposition party the Greens. On the other hand, preferences for right-wing opposition parties seem to profit from negative evaluations of the economy and suffer in case the state of the economy is perceived as good, even though positive effects seem to be more important than negative effects resulting from favourable evaluations.

Evaluations of the local economy, however, seem to affect mainly the governing OeVP and the opposition party of the Greens while preferences for other opposition parties remain about the same. Additionally, we see that extreme evaluations as ‘much better/worse’ have less influence than evaluations as ‘somewhat better/worse’, and that OeVP can even profit from evaluations of the local economy as ‘somewhat worse’. Evaluating the local economy as ‘much better’, however, only shows effects for the opposition parties. Here, again, we can see that favourable evaluations positively affect the Greens and have a negative impact on preferences towards FPOe and Team Stronach.

Looking at the model fit statistics still shows that hierarchical modelling does a better job than single-level models would do, even though the hierarchical modelling of OeVP preferences is only significantly better on the 0.1 significance level. However, preferences towards all opposition parties are still better described using hierarchical modelling; while the likelihood-ratio test regarding the SPOe model has only barely changed.

	SPOe	OeVP	FPOe	Greens	TeamS
Chi ²	2.76	5.37	18.47	27.7	8.16
p-value	0.2519	0.0683	<0.001	<0.001	0.0169

Table 17: Likelihood-Ratio Tests - Model (1)

5.4.2. Direct Level 2 Effects on Party Preferences

After investigating the effects of economy perceptions on party preferences, contextual variables are included in the models to investigate direct level 2 effects of the economic context on party preferences. By looking at Table 18 (next page) we see that only few aggregate variables do influence only some parties.

Starting with the *change in housing prices*, we see that there is no effect at all for this variable on any party. Thus, regional inflation (which was roughly measured using the proxy measure of housing prices) seems not to influence party preferences. This is also true for the first variable on unemployment change that shows the *change of unemployment between September 2012 and September 2013*, the month of the national election 2013: This macroeconomic figure seems not to directly influence party preferences as well.

Controls	SPOe	OeVP	FPOe	Greens	TeamS
Gender (ref. cat.: male)	0.208+ (0.116)	0.236* (0.107)	-0.425** (0.131)	0.613*** (0.117)	-0.365*** (0.104)
Age	0.0223*** (0.00437)	0.00193 (0.00405)	-0.0261*** (0.00495)	-0.00420 (0.00445)	-0.0120** (0.00394)
Edu: finished secondary education (ref. cat.: up to secondary education)	-0.0164 (0.246)	0.549* (0.228)	-0.573* (0.276)	0.446+ (0.247)	-0.374+ (0.220)
Edu: higher education (ref. cat.: up to secondary education)	-0.0547 (0.268)	0.907*** (0.248)	-1.828*** (0.301)	1.754*** (0.270)	-1.332*** (0.239)
Union Membership (ref. cat.: no)	-0.766*** (0.139)	0.447*** (0.129)	0.0699 (0.158)	0.0845 (0.141)	0.195 (0.125)
Occupation: civil servant (ref. cat.: employee)	-0.0331 (0.179)	0.0469 (0.166)	0.305 (0.203)	-0.390* (0.181)	0.0659 (0.162)
Occupation: self employed (ref. cat.: employee)	-0.959*** (0.203)	0.272 (0.186)	-0.149 (0.228)	-0.515* (0.204)	0.0612 (0.181)
Occupation: in education (ref. cat.: employee)	0.719*** (0.216)	0.424* (0.201)	-1.256*** (0.244)	1.071*** (0.223)	-0.778*** (0.195)
<i>Economy Perceptions</i>					
Nat.Eco.: much worse (ref.cat.: about the same)	-1.441*** (0.186)	-1.188*** (0.173)	1.494*** (0.211)	-1.594*** (0.190)	1.085*** (0.168)
Nat.Eco. somewhat worse (ref.cat.: about the same)	-0.555*** (0.144)	-0.205 (0.133)	0.715*** (0.162)	-0.537*** (0.146)	0.433*** (0.129)
Nat.Eco.: somewhat better (ref.cat.: about the same)	0.223 (0.167)	0.561*** (0.154)	-0.432* (0.189)	-0.00668 (0.169)	-0.296* (0.149)
Nat.Eco.: much better (ref.cat.: about the same)	0.252 (0.894)	1.428+ (0.822)	1.753+ (1.011)	0.296 (1.005)	0.634 (0.799)
Loc.Eco.: much worse (ref.cat.: about the same)	-0.243 (0.217)	-0.482* (0.200)	-0.0514 (0.248)	-0.0265 (0.225)	-0.373+ (0.194)
Loc.Eco.: somewhat worse (ref.cat.: about the same)	0.222 (0.167)	0.280+ (0.155)	-0.111 (0.189)	0.423* (0.170)	-0.226 (0.150)
Loc.Eco.: somewhat better (ref.cat.: about the same)	0.416** (0.142)	0.544*** (0.131)	-0.337* (0.162)	0.605*** (0.145)	-0.308* (0.128)
Loc.Eco.: much better (ref.cat.: about the same)	0.0749 (0.278)	0.363 (0.256)	-0.735* (0.314)	0.901** (0.283)	-0.398 (0.247)
<i>Contextual Variables</i>					
Unemployment change (09/2012-2013)	0.808 (0.543)	0.109 (0.489)	-1.123 (0.719)	0.388 (0.679)	-0.576 (0.495)
Unemployment change (Annual Mean)	-1.501 (1.595)	-2.696+ (1.432)	2.319 (2.124)	0.893 (1.988)	1.393 (1.474)
Self-Employed<11,000	3.472* (1.373)	-0.200 (1.232)	1.331 (1.864)	-1.782 (1.786)	2.497* (1.261)
Net Income Change	-0.0158 (0.0129)	0.0293* (0.0115)	0.00742 (0.0183)	-0.0281 (0.0177)	0.0241* (0.0120)
Housing Change	0.00865 (0.0105)	-0.00449 (0.00928)	-0.00249 (0.0130)	-0.0114 (0.0117)	-0.0123 (0.00985)
Constant	3.928*** (0.355)	2.500*** (0.330)	4.902*** (0.405)	3.072*** (0.366)	3.926*** (0.318)

Table continued on next page

<i>Table continued</i>					
	SPOe	OeVP	FPOe	Greens	TeamS
Var(RC)	1.02e-17 (8.27e-17)	5.55e-10 (0.3.64e-09)	0.0885003 (0.0866249)	0.1648077 (0.1032378)	1.12e-10 (6.90e-10)
Var (RC PD)	0.0600702 (0.0577722)	0.0335663 (0.0518262)	0.1519516 (0.103654)	0.0899852 (0.0896272)	0.0642799 (0.0515064)
Var (residual)	7.740499 (0.227267)	6.555154 (0.1946769)	9.818041 (0.2867891)	7.808076 (0.2299139)	6.163656 (0.1818174)
N	2435	2401	2436	2403	2412
Standarderrors in parentheses					
+p<0.1 * p<0.05 ** p<0.01 *** p<0.001					

Table 18: Influence of Aggregate Variables (Direct Level 2 Effects) - Model (2)

The second unemployment change variable that shows the *change of the annual mean unemployment rate between 2011 and 2012*, however, has a significant effect on party preferences towards the OeVP: The higher the increase in unemployment was between 2011 and 2012, the lower were party preferences towards OeVP. This, however, is not in line with issue ownership theory that assumes that especially the Social Democratic SPOe should be held accountable for labour market development. Other significant influences of local labour market development on party preferences apart from that cannot be detected.

Change in net incomes does also have a significant positive effect on preferences for OeVP and Team Stronach: The higher the increase of net income was, the higher preferences for OeVP or Team Stronach are. However, there is no effect on preferences towards other parties apart from these two.

The *share of self-employed who earns less than 11,000 Euro per year* does have the strongest influence on party preferences. Here we see that the higher this share is, the higher are preferences for SPOe and Team Stronach. Other parties, however, seem to not be affected by this contextual variable.

These two findings regarding the impact of contextual variables on preferences towards Team Stronach are somewhat contradictory: There are two positive significant effects on preferences towards Team Stronach, however, one results from a negative economic development (many self-employed who make not much money) while the other is a favourable economic development (higher than average income increase). This could mean that Team Stronach preferences are especially high in areas with specific branches that provide good salaries, however, jobs in these branches are rare and hard to find. Thus, people are starting their own businesses but still do not make much money.

To sum up the results of this third analysis, we see that contextual influence mainly affects preferences for the opposition party Team Stronach and the governing OeVP while there are no effects for the opposition parties FPÖ and the Greens. The strongest impact on party preferences is associated with the share of self-employed with low incomes. Surprisingly, unemployment change (included as short-term and long-term change) does not show any strong influence on party preferences; even though this macroeconomic factor is regarded as being important in both the economic voting literature as well as election forecasting models.

What about the other contextual variables? An increase in net incomes can be regarded as a favourable local economic development, thus, the positive effect on OeVP preferences is in line with economic voting theory. However, since Team Stronach also seems to be positively affected by above average increases of aggregate incomes, this result should be elaborated further. The same applies to the comparatively strong effects of self-employed with low incomes: In this case, FPÖ and Team Stronach seem to be similarly affected by this economic development even though the first is part of the government while the latter is a (comparatively newly founded) opposition party.

The effect of unemployment change on OeVP preferences is again in line with theoretical considerations regarding economic voting: An increase in unemployment is an unfavourable development of the local economy and it has a negative effect on party preference for the governing OeVP. However, FPÖ is not affected by this contextual variable. Thus, a clear interpretation in accordance to theoretical approaches such as economic voting cannot be easily made based on these results.

The opposition parties FPÖ and the Greens, however, seem to be unaffected by the economic context. This is remarkable since the ICCs are largest for these two parties while corresponding values for the governing parties are rather low. This indicates that preferences towards these two parties, FPÖ and the Greens, are more affected by spatial location than preferences towards other parties but not (yet) captured by economic contextual variable. However, variables in the next chapters we will see whether preferences towards these two parties can be better explained using social or media contextual than using economic contextual variables.

Turning to the model fit statistics (see Table 19) we also see that the hierarchical approach is best suited for the same two parties while preferences for other parties are not significantly better modelled than using a single-level approach. However, it

remains rather unclear why we could not detect any meaningful direct contextual impact.

	SPOe	OeVP	FPOe	Greens	TeamS
Chi ²	1.66	0.47	14.64	23.08	2.2
p-value	0.436	0.7919	<0.001	<0.001	0.3328

Table 19: Likelihood-Ratio Tests - Model (2)

5.4.3. Cross-Level Interactions

Including cross-level interactions with contextual linkage, operationalised as the number of years that respondent live in the same political district, reveals some more interesting results. First, we see that there are no effects of *unemployment* change any more – neither for the effect of unemployment when contextual linkage is 0 nor is there a significant interaction between contextual linkage and unemployment change (regardless whether the change between September 2012 and 2013 or the annual rates are considered).

Additionally, there are more significant effects of *net income change* after inclusion of the interaction term (OeVP, the Greens, and Team Stronach). For two of these three significant effects of income change when contextual linkage is 0 (which is the coefficient of income change in Table 21), there is also a significant interaction with contextual linkage (for OeVP and the Greens).

Regarding the *change in housing prices*, there is now a significant effect (again, when contextual linkage is 0) and a significant interaction with contextual linkage as well for both governing parties. For Team Stronach this effect is only significant when contextual linkage is 0; thus, there is no interaction with contextual linkage. These effects and interactions will be discussed and presented on the following pages.

First, we see that the model fits statistics have not drastically changed after the inclusion of the interaction terms. The models still do a better job than single-level models regarding FPOe and the Greens, however, they are not significantly better than single-level models regarding SPOe, OeVP, and Team Stronach.

	SPOe	OeVP	FPOe	Greens	TeamS
Chi ²	1.76	0.51	13.64	23.72	2.09
p-value	0.4138	0.7746	0.0011	<0.001	0.3513

Table 20: Likelihood-Ratio Tests - Model (3)

Controls	SPOe	OeVP	FPOe	Greens	TeamS
Gender (ref. cat.: male)	0.224+ (0.116)	0.244* (0.107)	-0.430** (0.131)	0.610*** (0.117)	-0.369*** (0.104)
Age	0.0217*** (0.00480)	-0.00124 (0.00444)	-0.0286*** (0.00544)	0.00149 (0.00488)	-0.0121** (0.00433)
Edu: finished sec. edu. (ref. cat.: up to sec. edu.)	-0.0303 (0.246)	0.559* (0.228)	-0.574* (0.276)	0.421+ (0.246)	-0.380+ (0.220)
Edu: higher education (ref. cat.: up to sec. edu.)	-0.0659 (0.268)	0.922*** (0.248)	-1.806*** (0.302)	1.700*** (0.270)	-1.331*** (0.240)
Union Membership (ref. cat.: no)	-0.761*** (0.139)	0.447*** (0.128)	0.0779 (0.158)	0.0798 (0.141)	0.205 (0.125)
Occupation: civil servant (ref. cat.: employee)	-0.0373 (0.179)	0.0606 (0.165)	0.329 (0.203)	-0.408* (0.181)	0.0794 (0.162)
Occupation: self employed (ref. cat.: employee)	-0.945*** (0.203)	0.255 (0.186)	-0.170 (0.228)	-0.498* (0.204)	0.0539 (0.181)
Occupation: in education (ref. cat.: employee)	0.706** (0.216)	0.430* (0.201)	-1.249*** (0.244)	1.081*** (0.223)	-0.772*** (0.195)
<i>Economy Perceptions</i>					
Nat.Eco.: much worse (ref.cat.: about the same)	-1.442*** (0.186)	-1.207*** (0.172)	1.489*** (0.211)	-1.589*** (0.189)	1.085*** (0.168)
Nat.Eco. somewhat worse (ref.cat.: about the same)	-0.568*** (0.143)	-0.209 (0.132)	0.717*** (0.162)	-0.541*** (0.145)	0.437*** (0.129)
Nat.Eco.: somewhat better (ref.cat.: about the same)	0.233 (0.167)	0.582*** (0.153)	-0.409* (0.189)	-0.0194 (0.169)	-0.285+ (0.149)
Nat.Eco.: much better (ref.cat.: about the same)	0.253 (0.892)	1.379+ (0.819)	1.755+ (1.010)	0.322 (1.003)	0.647 (0.798)
Loc.Eco.: much worse (ref.cat.: about the same)	-0.237 (0.216)	-0.469* (0.200)	-0.0370 (0.248)	-0.0276 (0.225)	-0.363+ (0.194)
Loc.Eco.: somewhat worse (ref.cat.: about the same)	0.227 (0.167)	0.319* (0.154)	-0.0921 (0.189)	0.409* (0.170)	-0.217 (0.150)
Loc.Eco.: somewhat better (ref.cat.: about the same)	0.407** (0.142)	0.535*** (0.131)	-0.330* (0.162)	0.597*** (0.145)	-0.304* (0.128)
Loc.Eco.: much better (ref.cat.: about the same)	0.0837 (0.278)	0.368 (0.255)	-0.713* (0.315)	0.862** (0.283)	-0.392 (0.247)

Table continued on next page

Table continued

	SPOe	OeVP	FPOe	Greens	TeamS
Contextual Variables + Interactions					
Contextual Linkage	0.00115 (0.00372)	0.00335 (0.00343)	0.00326 (0.00423)	-0.00910* (0.00378)	-0.000112 (0.00335)
Unemployment change (09/2012-2013)	0.984 (0.849)	0.275 (0.782)	-0.317 (1.025)	0.0503 (0.951)	-0.263 (0.761)
Contextual Linkage*Unemployment change (09/2012-2013)	-0.00869 (0.0301)	-0.00861 (0.0280)	-0.0377 (0.0339)	0.0152 (0.0309)	-0.0146 (0.0268)
Unemployment change (Annual Mean)	-2.659 (2.455)	-0.412 (2.250)	1.144 (3.008)	0.162 (2.762)	0.204 (2.242)
Contextual Linkage*Unemployment change (Annual Mean)	0.0504 (0.0850)	-0.108 (0.0784)	0.0489 (0.0964)	0.0341 (0.0877)	0.0521 (0.0767)
Self-Employed<11,000	3.370 (2.110)	2.499 (1.927)	2.246 (2.601)	-1.757 (2.430)	2.804 (1.914)
Contextual Linkage*Self- Employed<11,000	0.00565 (0.0700)	-0.126+ (0.0648)	-0.0436 (0.0795)	0.00634 (0.0715)	-0.0149 (0.0629)
Net Income Change	-0.0216 (0.0189)	0.0572*** (0.0171)	0.0339 (0.0241)	-0.0548* (0.0227)	0.0348* (0.0173)
Contextual Linkage*Net Income Change	0.000285 (0.000629)	-0.00134* (0.000581)	-0.00117 (0.000717)	0.00122+ (0.000643)	-0.000457 (0.000567)
Housing Change	-0.0263+ (0.0150)	-0.0265* (0.0133)	-0.0192 (0.0177)	-0.0176 (0.0159)	-0.0261+ (0.0140)
Contextual Linkage*Housing Change	0.00175** (0.000533)	0.000983* (0.000424)	0.000849 (0.000600)	0.000262 (0.000536)	0.000659 (0.000480)
Constant	3.940*** (0.355)	2.552*** (0.329)	4.924*** (0.405)	3.072*** (0.367)	3.929*** (0.319)
Var(RC)	1.99e-18 (1.69e-17)	1.64E-10 (1.05e-09)	0.0875737 (0.0855917)	0.1732415 (0.1047995)	1.12e-10 (7.02e-10)
Var (RC PD)	0.0619204 (0.055122)	0.034417 (0.0512201)	0.1465811 (0.1023776)	0.0867675 (0.089706)	0.0639292 (0.0520732)
Var (residual)	7.702402 (0.2251191)	6.501939 (0.1927653)	9.792055 (0.2861235)	7.774381 (0.2290669)	6.15555 (0.1816675)
N	2434	2400	2435	2402	2411

Standard errors in parentheses
+p<0.1 * p<0.05 ** p<0.01 *** p<0.001

Table 21: Cross-Level Interaction Effects - Model (3)

Let us first look at the interaction effect of change in net incomes and contextual linkage (operationalised as the number of years respondents already live in the PD) on preferences for the governing party OeVP. Starting with the direct level 2 impact of change in net incomes on party preferences for OeVP, we see that there is a positive relationship: The higher net incomes increased between 2008 and 2012, the higher preferences for OeVP were on average.

However, we must keep in mind that once interaction effects are included in regression models the interpretation of direct effect coefficients change. Thus, this effect of change in net incomes on OeVP preferences presented in Table 21 can only be assumed for respondent with contextual linkage = 0; or put into other words, this is only true for respondents who just moved to this PD. This positive relationship between net income change and OeVP preference, however, becomes more negative the longer respondents are living in this PD (as the significant negative coefficient of net incomes and contextual linkage for OeVP preferences in Table 21 indicates). This is also shown in the figure on marginal effects of contextual linkage on the relationship between net income change and OeVP preferences (see **Fehler! Verweisquelle konnte nicht gefunden werden.** below).

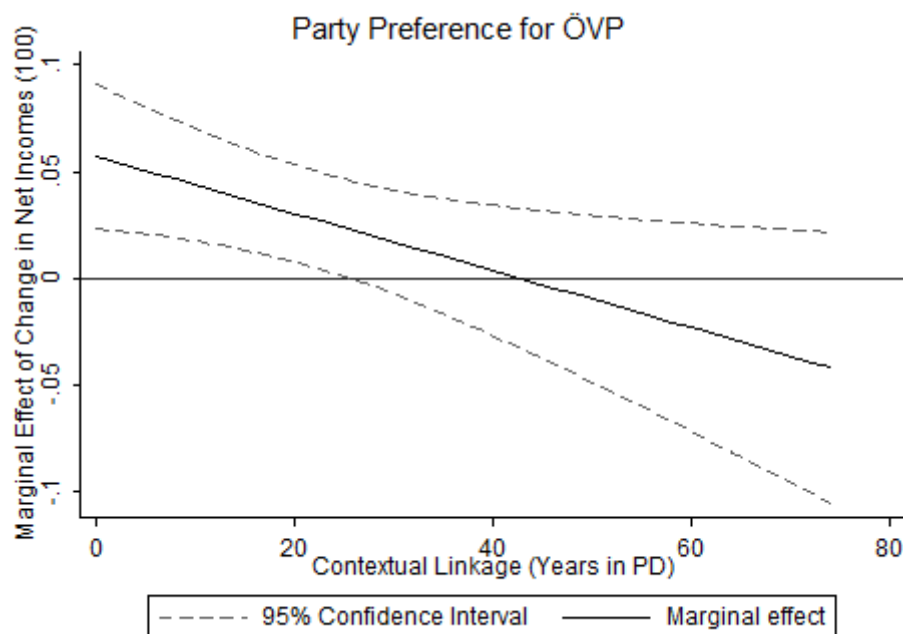


Figure 6: Marginal Effect Change in Net Incomes and OeVP Preferences (over Contextual Linkage)

Using this style of presenting statistical findings on interactions helps us to better understand the exact relationship between change in net incomes and OeVP preferences with everything else being equal and while also taking care of the moderating effect of contextual linkage. At the beginning (that is on the left-hand side), the effect of above average increase of net incomes is positive (as can be seen because of the above 0 value of the marginal effect of change in net incomes on the y-axis). However, with increasing contextual linkage (that is longer dwelling in the same PD and following the graph towards the right-hand side), this effect becomes

more and more negative (or better: less positive for OeVP preferences). The point at which we can actually assume this relationship to be in fact negative is about a little bit above 40 years of living in this PD (see **Fehler! Verweisquelle konnte nicht gefunden werden.** below and Figure 25 in Appendix). However, as we can also see using the confidence intervals, the relationship actually becomes insignificant before it becomes negative: For respondents that live a little bit longer than 20 years in the same PD, the confidence intervals are partly above and partly below 0.³⁴

Regarding the Greens we see that this result is reversed: The effect of net income change on preferences for the Greens is negative when contextual linkage is zero, indicating that everything being equal respondents who just moved to this PD are less in favour of the Greens the higher net incomes increased between 2008 and 2012. This relationship becomes more positive the longer respondents already lived in their PD (see Figure 7). For respondents with an average level of contextual linkage (and, thus, living about 22 years on their PD), however, this relationship is still negative (see Figure 26 in Appendix): The more net incomes increased, the lower are preferences for the Greens. Finally, the relationship becomes positive after living in the same PD for at least a little bit more than 40 years (though is still insignificant)

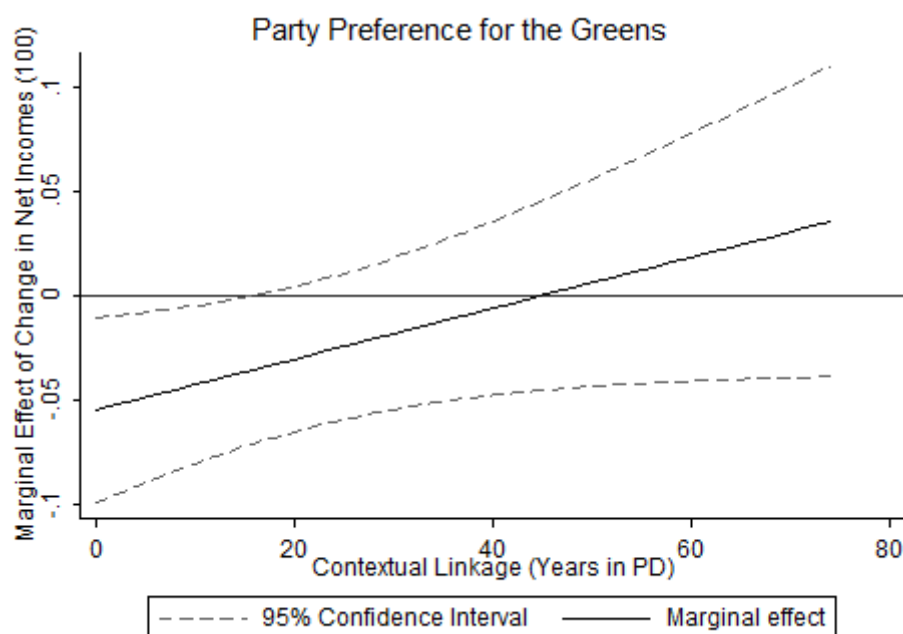


Figure 7: Marginal Effect Change in Net Incomes and the Greens Preferences (over Contextual Linkage)

³⁴ See also Brambor, Clark, and Golder (2005); Williams (2012) on marginal effects and plotting of marginal effects.

Turning to the interaction between the change in housing prices and contextual linkage, we see that the influence between change in housing prices and party preference is moderated by contextual linkage only for the governing parties SPOe and OeVP. Here we can observe that this relationship is negative for respondents who just moved to their PD: The bigger the increase (or change) in housing prices was, the lower are party preferences for the governing parties. However, this relationship changes and becomes (more) positive the longer the respondents already live in their PD, as can be seen in Table 21 and Figure 8 and Figure 9, respectively.

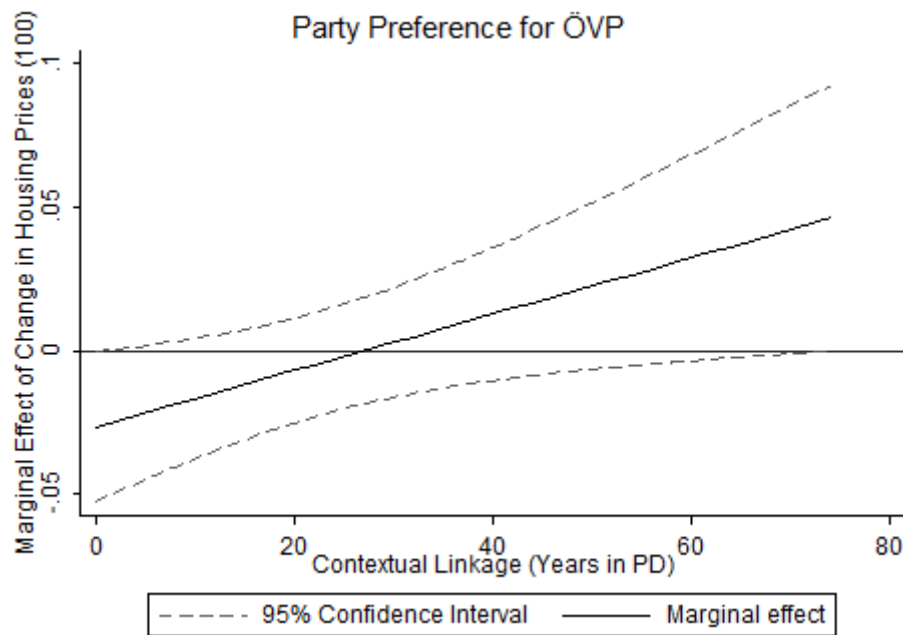


Figure 8: Marginal Effect Change in Housing Prices and OeVP Preferences (over Contextual Linkage)

For respondents who live about the average time (of around 22 years) in their PD, we see a slightly negative influence on preferences for OeVP and a slightly positive influence on preferences for SPOe. Regarding respondents living longer than the average time in their PD, we see a comparatively strong positive effect between change in housing prices and party preferences, especially for SPOe (see Figure 8 and Figure 9 or Figure 27 and Figure 28 in Appendix). However, we can say that the interaction between contextual linkage and housing prices is clearly significant for both governing parties with a higher level of significance for SPOe preferences.

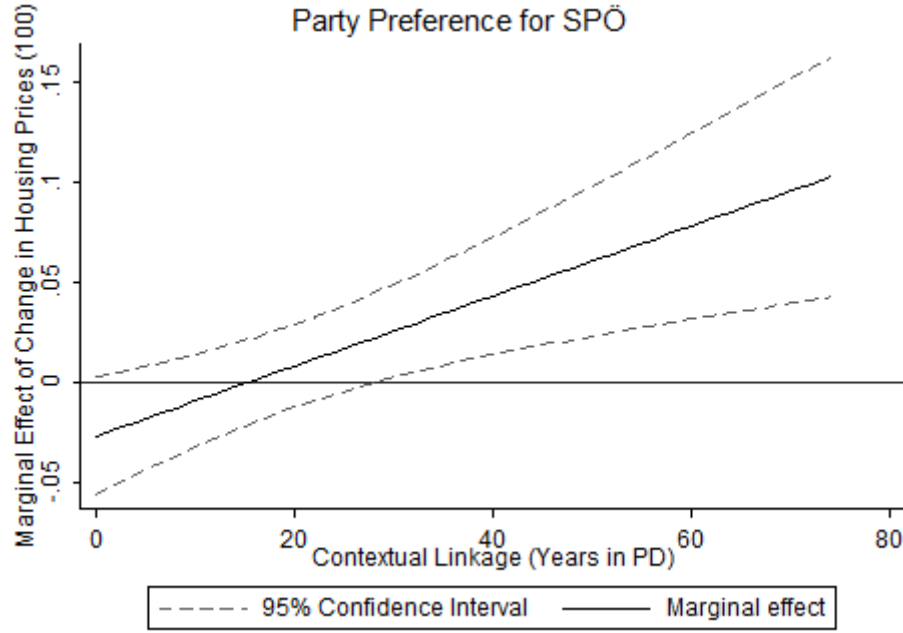


Figure 9: Marginal Effect Change in Housing Prices and SPOe Preferences (over Contextual Linkage)

Regarding the two opposition parties FPOe and Team Stronach we do not see any significant cross-level interactions effects. In the next section, the random part of the models (that is the decomposition of variance between the different levels of analyses) will be discussed. This will help us to better evaluate the total amounts of variance that can be observed on the three analytical levels of this study. By doing so, we can assess for which party how much variation can be found at what level.

5.4.4. Random Effects

Now the relative importance of each level of analysis shall be discussed. In order to do so, variation partition coefficients (VPC) that report the proportion of the observed response variation at each level of analysis are calculated (see Leckie, 2013). The formula to calculate VPCs varies with the level for which it should be calculated. Thus, calculation must be conducted separately for each level. On RC level 3 (variation between RCs) this formula is

$$VPC_{RC} = \frac{Var(RC)}{Var(RC) + Var(RC|PD) + Var(residual)},$$

on PD level 2 (variation within RCs between PDs) it is

$$VPC_{RC|PD} = \frac{Var(RC|PD)}{Var(RC) + Var(RC|PD) + Var(residual)},$$

and on respondent level 1 (variation within PDs between respondents) it is

$$VPC_{residual} = \frac{Var(residual)}{Var(RC)+Var(RC|PD)+Var(residual)}.$$

The corresponding estimates to be filled in each formula can be found in the random part on the bottom of Table 14, Table 16, Table 18, and Table 21. An overview on VPCs is presented in Table 22.

	SPOe	OeVP	FPOe	Greens	TeamS
<i>Model 0</i>					
RC	0.00000	0.00612	0.00576	0.01066	0.00018
RC PD	0.01021	0.00937	0.01897	0.01670	0.01553
Residual	0.98979	0.98452	0.97527	0.97264	0.98429
<i>Model 1</i>					
RC	0.00000	0.00397	0.01055	0.01498	0.00000
RC PD	0.01065	0.00923	0.01572	0.01835	0.01852
Residual	0.98935	0.98680	0.97372	0.96667	0.98148
<i>Model 2</i>					
RC	0.00000	0.00000	0.00880	0.02044	0.00000
RC PD	0.00770	0.00509	0.01511	0.01116	0.01032
Residual	0.99230	0.99491	0.97609	0.96840	0.98968
<i>Model 3</i>					
RC	0.00000	0.00000	0.00873	0.02156	0.00000
RC PD	0.00797	0.00527	0.01462	0.01080	0.01028
Residual	0.99203	0.99473	0.97665	0.96764	0.98972

Table 22: VPCs Economic Context Models

The rows labelled with ‘RC’ report the percentage of variation in party preferences on the level of RCs, the rows labelled with ‘RC|PD’ shows this percentage on PD level (thus, within RCs and between PDs). The rows labelled as ‘Residual’ show the residual variation that basically is variation between respondents (and within PDs). These numbers are reported for every model presented here starting with the control variables only models (Model 0) to the full models including cross-level interactions (Model 3).

Here we see that e.g. for Model 0 only 1.02 per cent of variation in party preferences for SPOe can be found within RCs and between PDs while 99 per cent of this variation can be found within PDs and between respondents. On RC level, the variation is tiny to almost non-existent (as we have already seen in the ICCs and caterpillar plots of nullmodels for SPOe on RC level). For OeVP, the variation on RC

level is 0.6 per cent for Model o, within RCs and between PDs it is 1.8 and within PDs and between respondents it is about 98 per cent etc.

This table also summarises the findings that had already been reported between the lines in this section: First, we see that variation on contextual level is barely important for SPOe and that other, most likely individual-level, factors do play a more important role in explanation of party preferences. However, RC variation is always smaller than variation on PD level for every party in every model presented. Regarding the various parties in detail, FPOe and the Greens show more variation on contextual level than the other parties that entered the Austrian parliament in 2013, however, PD level variation is also more important for these parties (as we also have already seen using the ICCs and caterpillar plots for these parties). Surprisingly, even though opposition parties (FPOe, the Greens, but also Team Stronach) show comparatively large ICCs, we could not detect much contextual influence of the economy on preferences towards these parties.

5.5. Summary and Discussion

After the presentation of this analysis' results, it is time to discuss these results and to answer the research questions and hypotheses of this chapter. Starting with the first two hypotheses on the influence of 'local economic performance', that is the influence of contextual (aggregate) variables in general, the answer is not straightforward.

These hypotheses target the (direct) influence of contextual characteristics on party preferences, however, we do not see clear-cut differences between opposition and governing parties as it is assumed in economic voting theory or the hypotheses stated above (see e.g. Table 18). Instead, economic development on contextual level seems to affect mostly preferences for the OeVP; as we can see by looking at the negative effect of unemployment change (that is increase in unemployment) and the positive effect of change in net incomes (that is increasing wages).

Both associations seem to be in line with economic voting and its assumptions: An increase in unemployment is unfavourable while an above average increase in incomes can be regarded as a favourable development. Thus, the effects and their direction towards preferences for OeVP make sense and are in line with economic voting theory.

However, these effects cannot be observed for SPOe, which seems to be rather unaffected by the economic context in general (with one exception, see below). But this is not as spurious as it sounds in the first place, since we have also seen that SPOe shows the lowest ICC values and, thus, also the lowest regional variation of party preferences in the first place. However, even though regional variation of party preferences might be smaller for SPOe than for OeVP, this cannot fully explain why the observed effects for OeVP cannot be observed for SPOe.

The two opposition parties FPOe and the Greens, however, seem to be mostly unaffected by contextual economic developments. In turn, the positive effect of increasing wages can also be observed for the opposition party Team Stronach. Regarding the third opposition party Team Stronach we also see that preferences for this party are higher the larger the share of self-employed earning less than 11,000 Euro per year is (which also is in line with economic voting theory). Additionally, preferences for this party are also higher the larger the increase in net incomes was (which is not in line with economic voting theory). The former positive effect of self-employed share can also be observed regarding the governing party SPOe; another finding that is not in line with economic voting theory.

Summing up, out of the five significant level 2 direct effects of the economic context only three are in line with theoretical assumptions; two of these can be detected regarding OeVP preferences. Regarding the remaining two significant direct level 2 effects that are not in line with economic voting theory, one can only speculate on why they had been found.

So, hypothesis H1a only holds for the governing party OeVP but not for the governing party SPOe. Regarding the opposition parties that are addressed in hypothesis H1b, this hypothesis can be rejected: There had been no direct contextual effects on preferences towards the two main opposition parties FPOe or the Greens.

But what other reasons can be found for these direct level 2 effects of the economic context on party preferences? First, it seems like the dividing line of the impact of economic context runs rather between different ideologies than between incumbency status since four (out of five) significant effects have an impact on right wing parties. So maybe economic context that captures actual macroeconomic development instead of only *perceptions of development* as in traditional survey research targets especially right-wing parties?

After all, the economy and its performance are still a main issue of right-wing parties; in the 2013 Austrian campaign, this is especially true regarding OeVP and Team Stronach. Even though SPOe as a Social Democratic Party focuses its campaigns on creating new jobs, decreasing unemployment, and demanding higher wages, politicians cannot create new jobs. Instead, governments can introduce economic policies that might or might not lead to more jobs for the unemployed, however, it is still up to the economy to recruit new workers and employees. Thus, for such policies the Federal Ministry of Science, Research and Economy is responsible, which was held by the OeVP before (and after) the 2013 election.

The positive contextual effect (that is also comparatively strong) of share of self-employed who earn less than 11,000 Euro per year also needs additional elaboration. First, this significant effect for preferences towards Team Stronach is in line with economic voting theory and with Frank Stronach's main campaign message that he knows how the economy works and how to create new jobs that provide workers and employees with decent incomes. However, and second, this positive effect towards SPOe is not in line with economic voting theory and its implications on which the first pair of hypotheses was based.

Again, on the reason for this one can only speculate. One possible explanation would be to assume being self-employed but making so little money that you do not even have to pay income tax is an unfavourable situation. Thus, you would rather like to be an employee and have a decent income instead of being self-employed and still making less money.

In this case, it would be rational to have preferences for SPOe or Team Stronach since both parties had an emphasis on the economy and creating new jobs in the Austrian 2013 campaign. Additionally, people that identify with these two parties also tend to name the economy as the most important problem in Austria before the 2013 national election (Kleinen-von Königslöw, Meyer, Vonbun, Wagner, & Winkler, 2014). Additionally, the party founder and businessman Frank Stronach always emphasised his experience in making business, founding companies, and criticised Austrian politics for making it too hard to start new businesses; another reason why Team Stronach could theoretically profit from this precarious condition of the local economy. Similar can be said regarding the Social Democrats and their (assumed) issue ownership on creating new jobs and standing up for worker's rights (Petrocik, 1996; van der Brug, 2004).

However, these findings do need further investigation and cannot be finally answered yet. By now, one could only speculate that mechanisms of economic voting, that could be summarised as ‘punish the government if it does not provide’, do not hold true when it comes to actual economic performance instead of perceived economic performance (that might also be addressed during the campaign by rival parties and, thus, might not always be as accurate as the actual economic facts and figures). Instead, it makes more sense to state that the economic context might be more relevant for right-wing parties than it might be for left-wing parties, and that in contexts with unfavourable economic performance respondents might tend to prefer parties with appealing campaign messages that fit the contextual problem-situation (no matter whether voters should punish them according to theory or not).

Turning to the next pair of hypotheses and directly connecting to what had already been said, H2a is only partly true since there is in fact an effect of self-employed with low incomes (even though the direction is not as expected in H1a) but no effect of unemployment on preferences for the SPOe. However, H2b is also only partly true since similar can be said regarding net income change (where we observed a significant effect) and housing prices (where we only observed an effect that is moderated by contextual linkage, however, this effect was stronger for SPOe). So, both hypotheses can be partly rejected and restated in the following way: The effect of the share of ‘working poor’ self-employed is stronger for SPOe than for OeVP while in turn the effect of increasing incomes on OeVP preferences is stronger than on SPOe preferences.

Turning to hypotheses H3 and the investigated cross-level interactions, the answer is a little bit clearer. In total, four interaction effects between contextual linkage and aggregate variables had been observed (see Table 21). In these cases, the effect turned its direction with increasing contextual linkage and, finally, became insignificant at the end of the contextual linkage scale (except for the interaction between contextual linkage and housing prices for SPOe).³⁵

The interaction between change in housing prices and contextual linkage that had been observed for the governing parties is maybe the most interesting effect. Here we see that an increase in housing prices is associated with a negative relationship with party preference for governing parties at the beginning. However, the longer

³⁵ However, the interaction effect becoming insignificant with increasing contextual linkage could also result from small numbers of observations at the end of this scale given that the mean contextual linkage is 22 years, but the scale ranges up to more than 70 years.

respondents already lived in their PD the more positive the effect gets. The change in local housing prices was included as a proxy measure for local inflation, but further consideration also allows for another possibility since housing can also be regarded as an investment.

We can observe a negative relationship between the increase in housing prices and preferences for the governing parties, however, with increasing contextual linkage this relationship becomes positive – the longer respondents already lived in their PD, the more positive the association gets. People who just moved to another PD had to rent or buy a house or an apartment recently, so they had to make an investment or even loan money. But the longer a person lives in the PD without moving to another place, the higher is the chance that this person already paid back the loan. Thus, increasing prices for housing are no longer a burden but rather a favourable development regarding their investment. So, government performance could be evaluated as positive by these long-time dwellers since people living in the same PD for years (theoretically) profit from that development because the value of their property increases.

These considerations, however, do also need further investigation. The absent direct level 2 effect and significant cross-level interaction effect for governing parties, however, does provide evidence that housing prices may be a better indicator of investments but might be a rather poor proxy measure for regional inflation.

Hypotheses H4a and H4b do not target contextual impact as it is operationalised in this thesis. But these hypotheses expand economic voting theory to the influence of perceptions of *local* economic performance. Here we can observe a dividing line between the two right-wing populist parties FPÖ and Team Stronach on the one hand and the governing parties SPÖ and ÖVP plus the Green party on the other hand. Apart from this ‘inclusion’ of the Greens to the government, the results are in line with economic voting theory especially regarding evaluations of the national economy: Governing parties (and the Greens) suffer from unfavourable evaluations while the right-wing opposition profits from such negative evaluations. Positive evaluations, however, do only have a positive effect for ÖVP but not SPÖ (apart from the spurious positive effect for FPÖ when the national economy was evaluated as ‘much better’ than three years ago).

Turning to the effect of evaluations of the local economy, we see a somewhat different picture: The governing party ÖVP and the Greens do benefit regarding preferences

for them even in case the local economy is evaluated as ‘somewhat worse’ than the rest of Austria. This positive effect increases even more for evaluations as ‘somewhat better’, which also shows a positive impact on SPOe preferences. Additionally, there also is a negative effect of a ‘much worse’ local economy for OeVP or SPOe preferences while ‘much better’ evaluations only affect the opposition parties FPÖ, the Greens, and Team Stronach (but we must keep in mind that only few people do think that their region is doing much better than other party of Austria). Most effects of performance evaluations, no matter whether national or local, affect the OeVP.

This also needs further investigation. One possible explanation could be that respondents hold the OeVP especially accountable for the economy since this party was and is still holding the Federal Ministry of Science, Research and Economy and, thus, could also be regarded as being especially responsible for economic performance (no matter on what level). Regarding the effects of the local economy on OeVP, one could also consider that most state governments (*Bundesländer*) are led by the OeVP. This could result in holding the OeVP also especially accountable for local developments of the economy since they are part of the federal government as well as most state governments. Further investigation of the role of state governments could shed more light into this question of the role of evaluating regional economic performance.

Another finding that does not explicitly result from testing the hypotheses of this section is that variation is much bigger on PD level than it is on the level of RCs, as we have seen in the random parts of the models and by looking at VPCs. Thus, the PD seems to be a more important context than the RC regarding contextual effects of the economy; a finding that is in favour of those who stress to use as small scaled regional levels as possible in contextual analysis. If this is also the case for social contextual influence will be investigated in the next chapter on the social context and its impact on party preferences.

As final words regarding the influence of the economic context, one could state the economic context is more important for right-wing parties than it is for left-wing parties. Additionally, economic context might also be especially important in case this (right-wing) party is also part of lower level governments. So, this chapter’s research question can be answered in the following way: The impact of the economic context on party preferences is not the same as assumed in individual-level frameworks. Right-wing parties seem to be more affected by the economic context. Additionally,

depending on how long a person already lives at a specific context, the direction of contextual economic influence may vary.

6. The Social Context

This chapter addresses the social context of political behaviour. Same as for the analyses of the economic context, these analyses investigate social contextual influence on the same two contextual levels of PDs and RCs. Conclusively, and similar to the economic context, the first research question of this section is: *What is the influence of varying social contexts on political behaviour?* This is followed by the sub-research question *who is especially responsive to social contextual influence?*

The dependent variable of this analysis still is *individual party preferences*; a combined variable consisting of propensity to vote scores and the sympathy towards the party leaders (see section 4.3.1). The underlying theoretical foundation of contextual influence that is information flow and processing theory (see sections 2.2 and 2.3) also remains the same. Since the underlying processes had already been discussed earlier in this thesis, I will start right away in the next sections with the question *how voters are influenced by their social environment, what aggregate factors influence individual political behaviour*, and what *hypotheses* will be tested regarding social contextual influence.

However, there are also some differences between the investigation of the economic and the social context: Aggregate indicators on economic conditions, e.g. unemployment rates but also changes in net incomes, are reported and discussed by the media, officials and experts on a regular basis. Sometimes media reporting is even considering that different regions are performing differently regarding their economic development. So, these indicators on the economy (and its spatial distribution) are comparatively well-known, sometimes easily accessible and straightforward to operationalise regarding their relevance for economic context and its impact on voting behaviour.

Regarding the social context, this is not the case: First, conceptualising the social context is not as straightforward as the conceptualisation of economic context is. We already have a quite good knowledge about which economic parameters differ by place and how they may influence political behaviour; but we do not (yet) have this knowledge for the social context or at least not to the same extent.

Second, operationalising social context is also a demanding task since not every interesting aggregate indicator related to social context is available.³⁶ Third, those aggregate indicators that are available must be theoretically useful for investigating social contextual influence. So, more effort must be put into data collection, conceptualisation, and data preparation regarding the investigation of social contextual influence than for the investigation of economic contextual influence.

In this chapter, several components of the social context will be presented and discussed briefly. This is followed by some hypotheses regarding the social context's impact on voting behaviour and an overview on social contextual variables used in the analyses. In this chapter's last section, data analyses will be performed and the research question regarding social contextual influence will be answered.

6.1. Social Context and its Influencing Characteristics

6.1.1. The Composition of Social Context

The social context consists of various components that can influence individual party preferences in one way or the other. However, all of these components are related to the population's aggregate sociodemographic characteristics at different places (or in this study: different contexts) since we know for a fact that the population is not the same across place: Different people live at different places, and almost no spatial context looks the same as another context. But what aspects of a voter's social environment are important when it comes to elections or politics; which socioeconomic or sociodemographic characteristics of place influence general preferences for political parties?

There are of course some sociodemographic variables, either contextual or individual, which are known for their influence on political behaviour and that will be used for a nominal definition of social context. However, there are some variables that had been included in political analyses only on the individual level in most cases (e.g. age). These variables will be included on the aggregate level in order to investigate whether their influence on aggregate level is similar to their influence on individual level. Nevertheless, most social contextual variables had already been included on aggregate level in some studies and, thus, we already have some information about their aggregate-level influence.

³⁶ So, another thing also stays the same as for other analyses: The lower the level of analysis is, the harder it is to gather good aggregate data.

These variables are the *share of immigrants* that live at a specific context (e.g. Coffé, Heyndels, & Vermeir, 2007; Pokorny, 2012; Rink, Phalet, & Swyngedouw, 2009; see also Savelkoul, Scheepers, Tolsma, & Hagendoorn, 2011 on a testing of different theoretical explanations regarding the impact of immigrant share), the place specific extent of *social stratification* regarding occupation and branches of the economy (T. A. Brown, 1981; Ron Johnston et al., 2001a; Walks, 2004, 2005), the *religiosity* of its inhabitants and their *religious denomination* (Goldberg, 2013, 2014), and contextual *social inequality* (Moss, Thaker, & Rudnick, 2013). The *age structure* of a context or age of individuals had only been investigated on individual level as the vote of the elderly (Goerres, 2008; Rhodebeck, 1993), however, I will also include age on the aggregate level in order to investigate the impact of living in a comparatively old context on individual political behaviour.

These different components of social context are summarised below in **Fehler! Verweisquelle konnte nicht gefunden werden.** which shows the nominal definition of social context as it is used in this study.

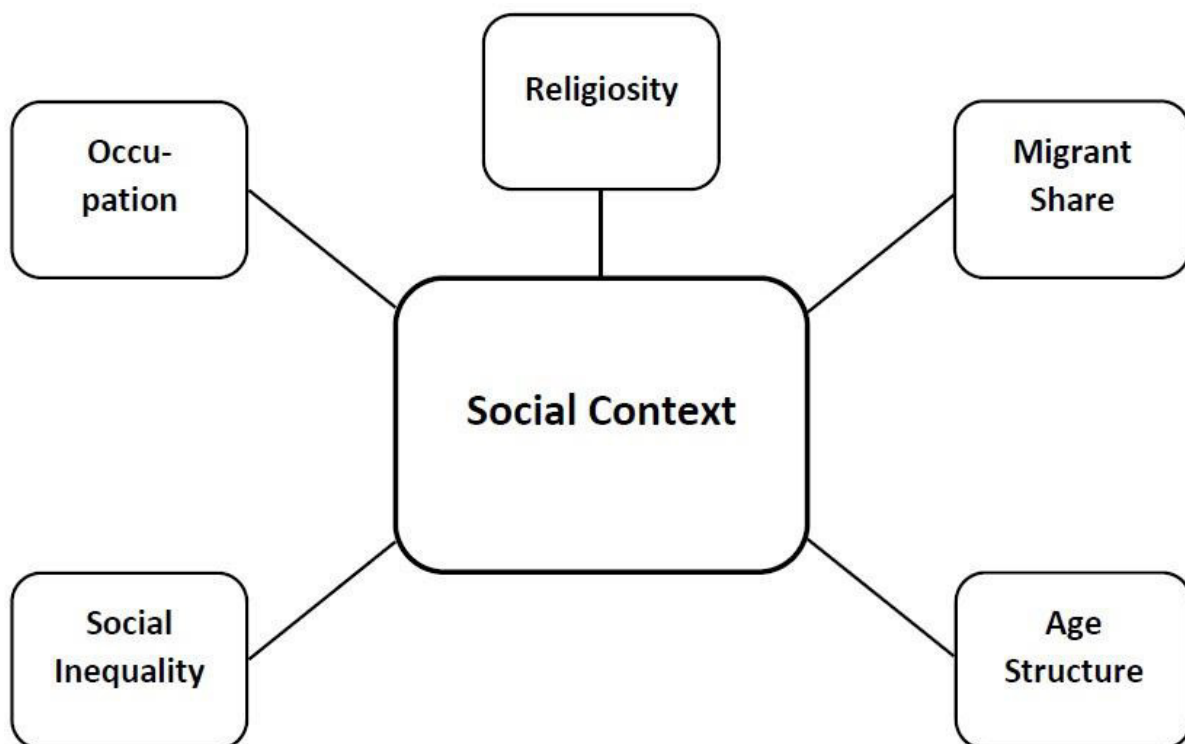


Figure 10: Components of Social Context

But how are the social context and its components exactly related to party preferences; in which ways are respondents influenced by their social context? This will be sketched out on the following pages.

6.1.2. Sociological Approaches: Class and Religion

Sociological approaches in the explanation of voting behaviour try to link voters' individual sociodemographic characteristics with their vote choice and party preferences. It is hypothesised that people's individual characteristics not only divide society into different societal groups on the aggregate level (e.g. separation into white-collar employees and blue-collar workers based on the individual characteristic of a voter's employment sector positioning) but also that these societal groups have different needs and claims. Because of these partly diametric interests of different groups, voters' individual characteristics also influence their behaviour at the ballot box (Berelson et al., 1954; see also Schoen, 2005). Consequently, one of the main points in this framework is that individual characteristics (e.g. occupational status, religiosity, or ethnicity) influence individual vote choices.

However, even though these individual characteristics are not the focus of this study, they become relevant when their impact on aggregate level is examined more closely. In fact, political attitudes and voting behaviour of societal groups can 'spill over' to others who are not members of these groups. This spread of political behaviour is (among other factors) also dependent on the number of people from which it can spill over to others; that is the contextual share of individuals who do belong to these sociodemographic groups (Schoen, 2005).³⁷

However, as for economic development, we also know that place also spatially differs regarding its sociodemographic characteristics. The various economic branches across place, of course, might result in a different employee and workers structure regarding individual labour market positioning: Some place might be dominated by blue-collar workers because of a nearby factory while another place might be a typical 'white-collar suburb'; an imagined third place could in turn be described as a mixed region regarding blue and white-collar employment sector positioning.

³⁷ Moreover, the extent of the adoption of attitudes and political behaviour is dependent on some other additional factors such as frequency of contact with other 'like-minded' voters, homogeneity of the social environment concerning political attitudes, and the actual content of discussions with others (Schoen, 2005).

In another framework that can also be described as being part of the (macro-) sociological approaches in election studies, Lipset and Rokkan (1967) suppose that this fragmentation of society also had an influence on the development of party systems on the macro level. They name four major types of so-called cleavages that on the one hand influence individual voting behaviour but had also an impact on the development of Western-European party systems on the other hand.

These cleavages run across the different dimensions of *income, status, and occupation*, across *secularism and religiosity* and influence of the church, between the *centre and the periphery*, and the regional or *urban-rural* cleavage. Membership and socialisation in 'quasigroups' across the lines of these cleavages lead to general attitudes that manifest themselves in cleavage-specific vote choices. Thus, it does not come as a surprise that there is good evidence that different positions along these cleavages (that also might include variations in partisanship on the individual level) is also followed by an aggregate-level effect on individuals.

There is good evidence in previous empirical findings that these place specific socioeconomic and sociodemographic characteristics have an impact on individual political behaviour. For instance, T. A. Brown (1981) shows that voters that moved from one partisan context to another partisan context tend to adjust their voting behaviour to the new place (or in other words: their new social context) they are living in.³⁸ Furthermore, they not only adjust their vote to their new context (which is, according to Brown, the "easiest prey to contextual effects", see T. A. Brown, 1981: 439) but also their party identification: After some time, people who moved from one partisan context to another contradicting partisan context develop a party identification that is in accordance to the overall partisan context in which they moved into.³⁹

But voters that adapt their political behaviour to be in line with the behaviour of those around them is not restricted to people who just moved from one place to another. E.g. Ron Johnston et al. (2001b) show that everything being equal (and thus controlling for individual characteristics that are known for influencing the vote),

³⁸ However, the fact that partisanship is also partly determined by sociodemographic characteristics links the partisan structure of an area with its social structure.

³⁹ Additionally, since the party identification of people who changed their context is weaker and less pronounced than party identification of those who did not move to another context, this finding is in accordance to theories on cross-pressures and the development of party identification in mixed partisan environments (see Schoen, 2005).

support for the Conservatives in the 1997 British general election was substantially higher in affluent areas than it was in blue-collar dominated areas. Similar phenomena can also be observed on smaller spatial scales such as the city and city district level. Thus, some research (e.g. Walks, 2004, 2005) shows that place of residence within a city has influence on party preferences, voting behaviour, and political attitudes.

However, except for the individual labour market positioning and socioeconomic status (as blue-collar worker, white-collar employee, or peasant), there are also other fragmentations of society that deserve further attention and can be incorporated in the framework and research design of contextual analysis. E.g. in addition to the aggregate effect of partisan and social class context described above, Goldberg (2013) simultaneously investigates the effects of religion and religiosity in Switzerland. He shows that both contexts, social class and religion, do have an impact on Swiss party preferences. In another study, Goldberg (2014) finds even more evidence that the religious context shapes individual party preferences insofar that the higher the share of Catholics in a Swiss Canton is the higher are respondents' preferences towards the Christian Democrats (CVP). Similar findings regarding the impact of the religious context can also be found in other countries; e.g. Botterman and Hooghe (2009) show that the local Catholic context still has an impact on voting for the Christian Democrat Party in Belgium. Thus, there already is some good empirical evidence of aggregate-level impact of religion and religious denomination on voting for and preferring Christian Democratic (that is mostly Conservative) parties that can also be linked to Lipset and Rokkan (1967).

Summing up, some 'classic' cleavages in voting behaviour can be translated and incorporated in contextual analysis and, thus, deserve further attention in this study of social context. Besides *occupation* (that determines the class context that a voter experiences), *religiosity* and its extent on the macro level should also be included in the analyses of social contextual influence on party preferences.⁴⁰ By doing so, two of the major cleavages identified by Lipset and Rokkan (1967) can be included in this analysis of social contextual influence.

⁴⁰ However, since there is no aggregate data on occupation available, information on the economic branches in which inhabitants are working are used as proxy measure for work and class related cleavages (see below in section 6.2.2).

6.1.3. The Influence of Migration and Immigrants

Besides labour market positioning and religion or religious denomination, there are, of course, also other components of the social context that influence individual political behaviour or vote choices. One of these components is the share of immigrants living at a spatial context. However, the impact of immigrants and migration on political behaviour has been investigated mostly regarding radical-right voting. So there already is some empirical research that helps us in the identification of underlying processes regarding the association between migration and political behaviour. However, accompanying theoretical considerations regarding the individual-level effects of immigrant share might be contradicting sometimes.

A popular approach in the explanation of the relationship between immigrant group size and far-right voting is often found in group threat theory (Blumer, 1958). In this approach, Blumer argues that a majority group is likely to develop prejudices towards out-groups (such as immigrants) in case they *feel threatened* by this group. Thus, it is irrelevant whether this threat is real or only imagined by the majority group: “If men define situations as real, they are real in their consequences” (Thomas, 1928: 572).

However, there are also opposing theoretical approaches regarding the correlation of immigrant group size and individual attitudes of majority group members towards immigrants. These can be summarised as ‘contact hypotheses’ (Allport, 1954). These theories assume that equal-level contact between members of the majority and the minority group reduces prejudices of the majority group. Consequently, the higher the share of immigrants at a specific place is the more opportunities for equal-level contact exist (given that people interact with each other at least to some extent), the less likely are prejudices against the minority group.

As often, empirical research regarding the plausibility of these two contradicting hypotheses – group threat theory versus contact hypothesis – comes to mixed findings: While Hjerme (2007) shows that neither the *actual size* of minority groups nor the *perceived size* of minority groups matters for xenophobic attitudes (which could, but not necessarily have to, result in far-right party preferences), Dixon and Rosenbaum (2004) show that group threat theory is better suited to explain prejudices against minorities with high ‘visibility’ but doing not so good when prejudices against other groups are investigated.

Additionally, Biggs and Knauss (2012) show that membership to the British National Party (another indicator of xenophobic attitudes and/or far-right voting and party preferences) is not necessarily dependent on the *share* of contextual immigrant population but also from *segregation* within the population; that is whether immigrants are living next door to the ethnic majority or in rather ‘closed communities’ without day-to-day contact with the ethnic majority.⁴¹ However, there are also some empirical findings that support Allport’s contact hypothesis.

For instance Savelkoul et al. (2011) show that there is a curvilinear relationship between the share of Muslim population and perceived ethnic threat in the Netherlands: While the perceived ethnic threat is first increasing with an increasing share of Muslim population, this attitude decreases after the Muslim share reached a certain threshold. However, other studies using individual-level data also show that contact with minority groups helps to reduce prejudices held by the majority group (see e.g. K. T. Brown, Brown, Jackson, Sellers, & Manuel, 2003).

There is also other research with results that cannot really be located between the two contracting hypotheses. E.g. Pokorny (2012) investigates contextual determinants (including immigrant share) on radical-right voting in Germany. She finds that not only increasing rates of immigrants in a region, but also less *decreasing* rates of immigrants do have a positive influence on voting for radical-right parties. Based on her results she concludes, consequently, that a larger decrease in immigrant share correlates with a lower individual probability to vote for a radical-right party in Germany.

Rink et al. (2009) come to a similar conclusion regarding the vote for the Vlaams Blok (now Vlaams Belang) in Belgium. In their study, they show that not only the contextual share of immigrants is associated with voting for the far-right Vlaams Blok but also that this direct level 2 effect is moderated by individual levels of formal education and occupational status. Thus, there is also evidence that cross-level interactions are operating regarding the contextual determinants of far-right voting. In another study that also had been conducted in Belgium, Coffé et al. (2007) show

⁴¹ This, however, introduces another factor on an even lower level than municipalities or neighbourhoods in contextual research on the influence of immigrant share. In order to investigate this question, one would need lower level data than municipality or neighbourhood data since the actual segregation of immigrants from the ethnic majority *within* municipalities and neighbourhoods must be investigated.

that the share of people from Turkey or the Maghreb at one's context does have (beside other contextual factors) an impact on voting for Vlaams Blok.

Summing up, we see that there is good reason for assuming that the contextual share of immigrants does have an impact on voters' preferences for far-right parties.⁴² Thus, by now it should be made clear that contextual immigrant population matters for far-right party preferences in one way or the other. However, it could also be the case that in fact the contact hypothesis holds true and that immigrant share is linked to party preferences towards other parties than far-right parties. This could be the case when voters oppose anti-immigrant policies and, thus, vote for other parties that are more 'immigrant friendly' and compete with far-right parties on the direction of immigration policies and whether policies should be more restrictive or inclusive.

6.1.4. Social Inequality and Voting

We have seen that there is lots of research investigating the influence of immigrant population on voting and political behaviour. Unfortunately, regarding the contextual influence of social inequality – that is the extent of a (un)equal distribution of wealth among the population – this is not the case. Nevertheless, this social phenomenon clearly deserves further attention also on the contextual level; not only because of the popular and broadly discussed work of Piketty (2014).

E.g. Moss et al. (2013) propose to investigate the effect of the macro-process of social inequality on the individual-level process of decision making – which can (and does) also manifest in voting and party preferences. They argue that social inequality might affect voters' feelings towards those above or below one's own positioning in the income structure which then, in turn, might also affect their vote choices. The reason for this could lie in the evaluation of one's own likelihood to move up or down in the income structure and, thus, to be affected by an unequal distribution of wealth in the future: If you see that your neighbours, the shopkeeper next door, your friends...etc. are struggling to pay their bills and to have a decent living on a daily basis, you might

⁴² Regarding the contextual impact of immigrant share there are also studies that investigate correlations with other social phenomena as well, of course. E.g. Newman, Hartman, and Taber (2012) investigate the influence of encounters with non-English speaking immigrants in the U.S.A. on anti-immigrant attitudes and preferences for anti-immigrant policies. By doing so, they introduce another dimension of the impact of immigrant share on individual behaviour called 'cultural threat' that not necessarily has to go along with visibility of the immigrant group. Another study by Sibley et al. (2013) not only additionally takes the respondents' neighbourhood and its socio-economic status into account but also the intercorrelations of immigrant share and neighbourhood status with individual belief systems about the state of society.

be worried to find yourself in a similar situation some day and, thus, prefer parties that support redistribution policies to avoid that situation.

However, there are only few studies that explicitly investigate contextual social inequality and its impact on individual behaviour or preferences. In one of these few studies, Leigh (2005) investigates the relationship between social inequality on the neighbourhood level and voting behaviour in Australian elections. He finds that the higher social inequality in a voter's neighbourhood is the higher is the individual propensity to vote for Labour; a party from which it could be assumed that it would stress redistribution policies once they are in power. So, we have at least one empirical finding on which we can connect this thesis' analyses in the next section.

6.1.5. The 'Grey Vote': Age Structure

Even though a context's age structure had not yet been included in a main (macro-level) theoretical framework on voting, we know that age is an important determinant in (Austrian) voting behaviour (see Johann, Glantschnigg, Glinitzer, Kritzinger, & Wagner, 2014; Kritzinger et al., 2013). But it is still unclear up to a certain extent whether age specific voting of the elderly (often called the 'grey vote') results from cohort effects (and, thus, will vanish in future generations) or from life cycle effects (and that we will all show similar voting patterns as today's elderly do once we reach the same age that they already have reached). However, Rhodebeck (1993) shows that it is not solely age per se that shapes electoral behaviour of the elderly but that it is rather the combination of age with other factors (e.g. economic status and/or partisanship) that results in the elderly's support of certain policies (that are partly age specific).

However, even though much unanswered questions regarding the 'grey vote' remain, other studies find more evidence that the elderly show a specific political behaviour. Goerres (2008) investigates some hypotheses regarding the elderly and voting and finds out that the elderly are less likely to vote for so-called 'New Politics' parties than younger generations are. Additionally, he shows that in proportional representation systems the elderly tend to vote for governmental or larger parties in general. This can be also seen in the results and analyses of the 2013 Austrian national election or earlier elections (see Johann et al., 2014; Kritzinger et al., 2013). However, I want to investigate whether this individual-level effect can also be observed on the aggregate level and whether the elderly influence others in their party preferences.

One could assume that if information flow and processing theory holds true, (young) voters that live in a context with a comparatively old population (and, thus, a large share of elderly) receive more cues and biased information by the elderly that might pull them towards evaluating political parties the same way as they do. By doing so, the contextual structure of age influences voters in their political behaviour. So, the aggregate-level age structure will also be included as fifth and final social contextual factor in this analysis of social contextual influence.

6.2. Data and Hypotheses on the Social Context

6.2.1. Hypotheses

In the following, the hypotheses regarding the social context will be stated to answer this chapter's research question *what is the influence of social context on individual behaviour?* These hypotheses address the different components of social context presented in section 6.1 and are oriented towards previous findings of social contextual influence. However, as already stated, there is no government versus opposition party dividing line but rather party specific hypotheses instead because the lines run rather between different ideologies of parties than their incumbency status. Thus, these hypotheses address in most cases the left-right dividing line of parties' ideologies.

The first pair of hypotheses is based on two different theoretical assumptions. Hypothesis 1a is mainly based on empirical findings by Coffé et al. (2007); as well as Rink et al. (2009). The assumptions included in these studies as well as Hypothesis 1a are based on group threat theory (Blumer, 1958). This theory suggests that a higher share of immigrants results in a larger preference towards far-right parties; in the Austrian case FPÖ. The reason for that can be found in members of the majority group being afraid of the minority group in one way or the other.

The second hypothesis, Hypothesis 1b, is based on an opposing theory that suggest that contact with immigrants and minority groups helps to reduce prejudices (Allport, 1954) and, thus, might lead to higher preferences for parties that do not propose anti-immigrant policies and position themselves as 'immigrant friendly'. These parties can be usually ascribed to left-wing parties, which are in the case of Austria SPÖ and the Greens. Such an investigation seems appropriate since there are good theoretical reasons on the one hand and empirical findings on the other

hand that support both directions of the relationship between contextual immigrant share and party preferences.⁴³ Consequently, the two hypotheses read as follows:

H1a: The preference for far-right parties (FPOe) is higher the larger the share of immigrants is.

H1b: The preference for left-wing parties (SPOe and the Greens) is higher the larger the share of immigrants is.

Turning to social inequality, similar can be said regarding the extent of social inequality and its impact on party preferences: Voters living in places with higher social inequality might be more aware of societal consequences that arise with social inequality, including the poor's need for redistribution policies and other welfare state policies. Additionally, these people that experience social inequality and its consequences day-to-day might also fear that they are more likely to experience poverty by themselves sooner or later than others living in more egalitarian areas. Thus, they are more likely to take the higher-level characteristic of contextual social inequality also into account when making decisions on the individual level or evaluating their own preferences towards parties running for election (Moss et al., 2013).

On the one hand, this higher awareness of social inequality and its consequences might lead to a more altruistic attitude and, consequently, might also influence party preferences towards left-wing parties that stress redistribution and anti-poverty policies (Ron Johnston et al., 2000; Ron Johnston et al., 2005; Leigh, 2005). On the other hand, however, respondents living in areas with lower contextual social inequality are not confronted with the consequences of poverty, social inequality and the need for a welfare state day-to-day. Thus, their party preferences towards right-wing parties that oppose redistribution policies might increase the lower contextual social inequality is. Regarding party preferences in Austria, this means that....

H2a: The preference for parties that support redistribution policies and social balance (SPOe and the Greens) is higher the higher the extent of social inequality in a geographic context is.

⁴³ However, other studies suggest that the direction of this correlation might be rather an issue of regionalisation and the spatial units used for analysis (Weber, 2015).

H2b: The preference for parties that oppose redistribution policies (OeVP, FPÖ, and Team Stronach) is lower the higher the extent of social inequality in a geographic context is.

However, regarding the influence of the share of the elderly in a spatial context the corresponding hypotheses are based on the finding that older people tend to support governing and large parties and are less likely to support new parties or parties without any government experience (see Goerres, 2008). Regarding the case of Austria studied in this thesis, all three attributes – government experience, long history, and large vote shares – apply to the current governing parties as of 2013 that are SPÖ and ÖVP. The Greens and Team Stronach should be less popular among the elderly since both parties are comparatively young, without experience in national government, and rather small.

Categorising FPÖ is a little bit harder since it can be located somewhere in between: It has been part of the government between 2000 and 2005 but lost lots of popularity and voters in the 2002 election. Since then, it has (again) distinctly smaller vote shares than the two ‘large’ Austrian parties SPÖ and ÖVP have. Additionally, many prominent party members (and all the FPÖ government members) left the party in 2005 and founded the party BZÖ. Thus, it is not clear whether FPÖ can be described as party with government experience or as a large party as SPÖ or ÖVP are. However, since FPÖ still has distinctly larger vote shares than the Greens or Team Stronach and was (at least officially, even though most party member with government experience left the party in 2005) part of the federal government, it is still described as a rather large party with government experience:

H3a: The preference for old, large, and governing parties (SPÖ, ÖVP, FPÖ) is higher the higher the share of people being at least 65 years or older is.

H3b: The preference for new and small parties or parties without experience in government (the Greens and Team Stronach) is lower the higher the share of people being at least 65 years or older is.

The next hypotheses are related to the social structure and social stratification of inhabitants and their cleavage specific party preferences (Berelson et al., 1954). It is assumed that people working in the primary sector (that is agriculture and forestry)

are more likely to support conservative parties than people working in other economic sectors are. This assumption is based on class cleavage and/or the urban-rural cleavage in Western political systems (see Lipset & Rokkan, 1967). This individual level association might also be present on the contextual level since people that work in the primary sector share their views and opinions in the flow of information and, by doing so, influence others who do not work in this sector. However, since the spatial context is dominated by such specific views and opinions, it is hypothesised that...

H4: The preference for conservative parties (OeVP) is higher the higher the share of people working in the primary sector is.

The same is true regarding religious people and their preferences for conservative (Christian) parties on the individual level. However, the impact of religious denomination on party preferences will also be investigated on the contextual level. Regarding the case of Austria with a large Catholic majority and only few people belonging to another religion or Christian denomination, it is assumed that the contextual share of Catholics is the most important aggregate-level characteristic linked to religion or religiosity. This restriction to Catholics is necessary since there are too few people that identify as Muslim, Protestant, Eastern European-Orthodox, or Jewish compared to Catholics.

Thus, it is hypothesised that there is not only an individual-level association but also a positive contextual correlation of religious denomination or religiosity and preferences for conservative parties such as OeVP (see Botterman & Hooghe, 2009; Goldberg, 2014), a party that is closely linked to the Roman-Catholic church and its values. Concurrently, there also is a negative contextual correlation for parties with an anticlerical tradition. Thus, ...

H5a: The preference for conservative parties (OeVP) is higher the higher the share of Catholics is.

H5b: The preference for anticlerical parties (SPOe, FPÖe) is lower the higher the share of Catholics is.

Finally, the impact of contextual linkage operationalised as the number of years someone has already been living at a spatial context will also be investigated regarding the social context: The longer people already lived at the spatial context,

the longer they were exposed to the information and cues that circulate in these contexts. Additionally, they should also be more aware of their context's characteristics and its state regarding social contextual characteristics. Thus, cross-level interactions of the individual contextual linkage and contextual variables will be investigated:

H6: Contextual linkage moderates the influence of social context; the longer a person lives in her PD the stronger gets the impact of social contextual indicators on party preference.

6.2.2.Social Contextual Data

Similar to the economic context, aggregate data on the five components of social context is provided by various sources. However, since the contextual data used for this analysis had not been collected for contextual analysis in the first place, we must accept varying time points and time periods of this data because there is no periodic publication of this data, especially on low levels. Nevertheless, time points and periods are always close to the election year 2013 and there are no reasons why major changes in the socioeconomic structure of context should be expected.

Again, most data is provided by the national statistical office *Statistics Austria*. This applies to aggregate administrative data on the contextual age structure (STATISTIK AUSTRIA, 2012b) and number of immigrants per PD in Austria (STATISTIK AUSTRIA, 2012c). The same is true regarding aggregate data on the number of employees in the various economic branches within a PD (STATISTIK AUSTRIA, 2012a).⁴⁴

Data on the age structure and number of immigrants dates back to the year 2012 and shows these distributions as of the reference day of January 1, 2012; that is nearly one and a half years before the 2013 election. Regarding branches of the economy, the data dates to 2010 and shows this distribution as of October 31, 2010; that is nearly three years before the election. However, this data is the most current available data on PD level as of the time of writing and there are no reasons why any significant changes between PDs (or RCs) should be expected in 2013⁴⁵.

⁴⁴ The original datasets from 2012 used in this analysis are no longer available on Statistics Austria's webpage but are still in custody of the author.

⁴⁵ This might not be true for the time after September 2015 since refugees that seek for asylum in Austria tend to live in large municipalities, especially the capital of Vienna. However, between 2010

Contextual age structure is included in the analysis as ‘contextual share of elderly’ that has been operationalised as the share of people that are at least 65 years old, the official retirement age for Austrian males. This share was calculated using the total number of inhabitants per PD. The same applies to the data on economic branches: Since there is no contextual information on the share of blue-collar or white-collar workers or similar data, the share of people working in the primary sector ‘agriculture and forestry’ was used. This share, again, was calculated as the total share of employees and workers in the primary sector on the total number of all people that are in employment. Even though the class cleavage is not captured best using this data, specific voting and party preference patterns of those working in agriculture or forestry can be assumed.

Now let us turn to migration, the number of immigrants and accompanying contextual data: What is referred to here as ‘immigrants’ is actually data on the share of people with another descent than Austrian; no matter whether they have the Austrian citizenship or not. To be specific; this is a joint measure that captures both people without the Austrian citizenship living in Austria and Austrian citizens who were born abroad (that are naturalised citizens in most cases). This measure also follows the official definition of immigrant background as it is reported by *Statistics Austria*. Thus, a broad view on immigrants and the phenomena of immigration is applied in this analysis since everyone with an immigrant background (that is whether they have roots to Turkey, Former-Yugoslavia, or Germany...etc.) is included in the same way in this study.

The reason for that is that Austria has a rather mixed structure of immigrants regarding their country of origin with lots of immigrants and naturalised citizens from former Yugoslavia, but also immigrants from other Western and Middle European countries (such as Germany, the Czech Republic, Slovakia, and Hungary) as well as from Turkey. So, this measure only captures whether people do have an Austrian background or whether they do not. Thus, *every* country of origin is treated the same way; regardless of their German, Turkish, Polish, or Former-Yugoslavian background; all immigrants are summarised as the contextual share of so-called ‘foreigners’.

and 2013, the election year, there were no major changes in either the spatial distribution of immigrants, economic branches, or age cohorts.

Aggregate data on religion, church attendance, and religiosity is regularly released by the Catholic dioceses (Österreichische Bischofskonferenz, 2013). Of course, this data only covers Catholics and excludes every other Christian denomination or other religious orientations. However, since the country studied in this thesis is a predominantly Catholic country with no other religious denomination close to the number of Catholics, this data is appropriate to capture contextual religiosity.

Regarding the point of time of this data, this data shows the annual share of Catholics on all inhabitants. The level of analysis regarding contextual religiosity are the Catholic dioceses and not PD or RC, inhabitation numbers, however, had been aggregated to that higher level since the Austrian Roman-Catholic church provides this data only on this higher-level regionalisation of dioceses. So, again, this data might be sometimes cross-classified since Catholic dioceses are a higher-level unit than PDs.

Additionally, data on contextual social inequality and differences in the income distributions within PDs and RCs will be included in the data analysis. The measure of social inequality used is the well-known Gini-Index that can range between 0 (in case everyone has the same income or the same amount of fortune) and 1 (in case only one person earns all the income by herself or possess all the fortune). The data on regional distribution of social inequality and the Gini Index was retrieved from a website hosted by the Vienna University of Economics and Business and from accompanying publications, respectively (Moser & Schnetzer, 2013, 2014). However, numbers presented on this website (as well as the map) are based on information that had been provided by *Statistics Austria* but edited and published by Moser and Schnetzer.

After data collection from the website, the data had been further edited and aggregated by myself since Moser and Schnetzer do not use the PD as lowest level of analysis but instead move down the spatial scale and report Gini coefficients on an even lower level. So, the regions that they have used and which are located in the same PD had been aggregated up to PD level before they could be included in my statistical analysis. Thus, the mean social inequality of these (smaller than PD level) regions is used as an indicator of contextual social inequality in every PD.

Table 23 gives an overview on the social contextual variables, their source, and point of time. All contextual variables had again been centred on their grand mean before

their inclusion into the analyses to make interpretation of the coefficients easier (since there is no theoretical useful zero point in the raw data).

Variable	Source	Time
Age Structure	Statistics Austria	January 1, 2012
Immigrants and Foreigners	Statistics Austria	January 1, 2012
Economic Branches	Statistics Austria	October 31, 2010
Catholics	Oesterreichische Bischofskonferenz	2012
Social Inequality	Moser & Schnetzer 2014	2011

Table 23: Social Contextual Variables

6.2.3. Individual Level Data

As already stated, the individual level variables used in this analysis basically remain the same as in the investigation of economic context. This means that both the *dependent variables* ‘individual party preferences’ towards the various parties (and their spatial variation, see section 4.3 and section 4.4, respectively) as well as the individual-level *control variables* do not change. Conclusively, individual level-control variables used in this investigation of contextual effects are again gender, age, education, occupation, and union membership (see section 4.3.2 on their importance for electoral behaviour in Austria).

However, the individual-level predictor variable that captures perception of the local economy in chapter 5 is not included anymore since this is not a social contextual variable. Unfortunately, there also is no individual-level counterpart of this information that fits into the analyses of social contextual influence. So, the hypotheses and accompanying analyses only target contextual influence in the true sense of the word without any individual-level hypothesis to be tested. Cross-level interactions with the information on ‘contextual’ linkage, however, will still be included in the analyses; since the interaction and possible moderating effects of long time dwelling with social contextual variables are investigated in hypothesis H6.

6.3. Data Analyses and Results

The hypotheses stated above in section 6.2.1 will be investigated using linear multilevel regression models, as it had already been done regarding the economic context in chapter 5 and described in section 4.2. The multilevel regression models’ specifications also remain unchanged as for the investigation of economic context: To investigate social contextual effects maximum-likelihood estimation and Stata 13 are used.

Another thing that stays the same as in previous analyses is the three-level hierarchical structure of the multilevel models that consists of respondents (level 1) that are nested within PDs (level 2) that are nested in RCs (level 3). Thus, variance decomposition into three analytical levels is ensured. However, there are also some points in which this analysis is different than the analysis of economic context in the previous chapter.⁴⁶

First, the baseline model that consists of only individual-level control variables will not be presented again since there had been no change in neither the control nor the dependent variables. Thus, a simple replication of this analysis is not needed.⁴⁷ Second, since there are no individual-level variables related to the social context as there had been for the economic context with the perception of the local and national economy, there will be no similar analysis investigating individual-level influence on party preferences. Because of that, the analysis of social context can start right away with the investigation of direct level 2 social contextual effects on party preferences. Thus, the investigation will not be extended stepwise as it had been done in the previous chapter; the first analysis of direct level 2 effects (Model 1) is followed by an analysis of cross-level interaction effects (Model 2) in order to answer Hypothesis 6.

6.3.1. Direct Level 2 Effects on Party Preferences

Results of this first analysis of direct level 2 social contextual influence are presented in Table 24. Starting with the effect of the *share of foreigners* (that is immigrants and naturalised Austrian citizens), we see that there are two significant effects on party preferences: The higher the share of foreigners is the higher are party preferences towards both the SPOe and the Greens. Thus, both parties benefit from an above average share of immigrants and Austrians with another country of birth than Austria. This effect is stronger for SPOe than it is for the Greens. However, there are no effects of the share of foreigners on preferences towards right-wing parties, regardless of whether they are far-right (that is FPOe), populist-right (Team Stronach) or conservative / Christian Democratic (OeVP).

⁴⁶ Apart from the contextual predictor variables, of course.

⁴⁷ See section 5.4.1 or Table 14 and Table 15 for these analyses on the individual level.

Controls	SPOe	OeVP	FPOe	Greens	TeamS
Gender (ref. cat.: male)	0.0883 (0.116)	0.146 (0.108)	-0.271* (0.130)	0.521*** (0.117)	-0.261* (0.103)
Age	0.0216*** (0.00438)	0.00158 (0.00411)	-0.0257*** (0.00493)	-0.00393 (0.00447)	-0.0116** (0.00391)
Edu: finished secondary education (ref. cat.: up to secondary education)	0.0295 (0.248)	0.622** (0.234)	-0.677* (0.276)	0.513* (0.250)	-0.451* (0.219)
Edu: higher education (ref. cat.: up to secondary education)	0.117 (0.269)	1.130*** (0.254)	-2.096*** (0.300)	2.013*** (0.272)	-1.505*** (0.238)
Union Membership (ref. cat.: yes)	-0.766*** (0.141)	0.423** (0.131)	0.0189 (0.158)	0.0681 (0.142)	0.162 (0.125)
Occupation: civil servant (ref. cat.: employee)	-0.0440 (0.181)	0.00919 (0.170)	0.368+ (0.204)	-0.413* (0.183)	0.121 (0.162)
Occupation: self employed (ref. cat.: employee)	-0.968*** (0.202)	0.292 (0.188)	-0.142 (0.226)	-0.531** (0.204)	0.0672 (0.178)
Occupation: in education (ref. cat.: employee)	0.825*** (0.213)	0.490* (0.201)	-1.444*** (0.239)	1.246*** (0.221)	-0.907*** (0.190)
Contextual Variables					
Foreigners	0.0263* (0.0114)	-0.00505 (0.0115)	-0.0147 (0.0138)	0.0200+ (0.0113)	-0.00916 (0.00956)
Gini Index 2011	-1.611 (2.961)	-0.263 (2.966)	-9.609** (3.555)	3.781 (2.940)	-5.799* (2.498)
Share of 65+	0.0347 (0.0340)	-0.0126 (0.0339)	-0.0290 (0.0406)	-0.0366 (0.0337)	-0.0216 (0.0287)
Share of Primary Sector	0.0663* (0.0336)	0.0318 (0.0335)	-0.0222 (0.0402)	-0.00237 (0.0336)	0.0265 (0.0284)
Share of Catholics	0.00309 (0.00592)	-0.00687 (0.00623)	-0.0199** (0.00724)	0.0350*** (0.00582)	-0.0123* (0.00492)
Constant	3.702*** (0.340)	2.505*** (0.324)	5.218*** (0.383)	2.816*** (0.346)	4.036*** (0.301)
Var(RC)	3.16E-18 (2.51E-17)	0.03597 (0.043153)	7.25E-08 (6.65E-07)	2.75E-06 (1.93E-05)	7.24E-10 (4.84E-09)
Var (RC PD)	0.070038 (0.05687)	0.050197 (0.065434)	0.161616 (0.10391)	0.054222 (0.057941)	0.025382 (0.043756)
Var (residual)	8.130015 (0.232863)	7.001349 (0.202599)	10.23487 (0.339907)	8.264407 (0.238979)	6.375019 (0.185084)
N	2534	2492	2535	2494	2508

Standard errors in parentheses
+p<0.1 * p<0.05 ** p<0.01 *** p<0.001

Table 24: Influence of Aggregate Variables (Direct Level 2 Effects) - Model (1)

Next and turning to the effect of *social inequality* on party preferences, we see that there are significant negative associations between the Gini Index 2011 and preferences towards the right-wing opposition parties FPOe and Team Stronach: A higher than average contextual social inequality is associated with a lower preference for these two parties on average. Regarding the left-wing parties SPOe and the Greens or the governing party OeVP, however, there is no correlation with social inequality. Thus, it seems like contextual social inequality does not only have no effect towards parties who stress redistribution policies, but also that other parties such as FPOe and Team Stronach, who not only do not lay any emphasis on this issue but also

oppose redistribution as in the case of Team Stronach and OeVP, benefit from an above average level of social inequality.

The results regarding the effects of share of elderly, people working in the primary sector, and the contextual share of Catholics are somewhat surprising or even spurious: While there is no effect at all regarding the *share of elderly* (and, thus, no evidence at all that the contextual 'grey vote' has an impact on party preferences), we can observe a positive impact of *people working in the primary sector* on SPOe preferences: A higher than average contextual share of workers and employees in the primary sector is associated with higher preferences for SPOe. However, there is no additional negative or positive effect of contextual share of the primary sector on any other party; including OeVP that is addressed in hypothesis 4. Especially the (non-)result of primary sector on SPOe and OeVP preferences respectively are surprising since this is opposed to theoretical assumptions stated earlier.

Nevertheless, this also allows for another interpretation: Even though there is no significant positive association between the share of people working in the primary sector and preferences for OeVP, there is a positive association between this share and SPOe preferences. The reason for that could be found that in a context in which many people are working in agriculture and forestry (and that is most likely also rather conservative and dominated by OeVP), people who are not working in this sector and are also not in favour of OeVP must stick together even more in order to enforce their interests. Thus, they do prefer SPOe to an even higher extent than people in other contexts with a maybe even lower share of people working in the primary sector – since they barely have an alternative.

Last, we see that the contextual *share of Catholics* shows significant impact on party preferences for FPOe, the Greens, and Team Stronach: An above average share of Catholics is negatively associated with preferences for FPOe and Team Stronach while there is a positive correlation with the Greens. These higher preferences towards the Greens could be explained in a similar way as before: Since the share of Catholics is above the national average (and, thus, the context is most likely also more conservative than other parts of the country), people that are not Catholic (or not religious) have to stick together and show higher levels of preferences towards the Greens. The government parties SPOe and OeVP, however, seem to be unaffected by the contextual share of Catholics.

Before we have a closer look on cross-level interaction effects of contextual variables and individual contextual linkage, likelihood-ratio tests of this first analysis of social context will be discussed. By looking at Table 25 we see that including a multilevel structure into the models is not significantly better than a single-level analysis for all parties. In fact, the hierarchical structure of the models used in this analysis is only better for OeVP ($p < 0.1$) and FPOe ($p < 0.05$), other parties, however, could be equally or maybe even better analysed using a single-level approach. This, however, provides evidence that a multilevel approach might not be the best choice for investigating the social context and that a ‘simple’ single-level approach might also do the job. Nevertheless, cross-level interactions will be included and analysed using a hierarchical structure in the following section.

	SPOe	OeVP	FPOe	Greens	TeamS
Chi ²	2.2	4.75	6.64	1.13	0.39
p-value	0.333	0.0929	0.0361	0.567	0.8233

Table 25: Likelihood-Ratio Tests - Model (1)

6.3.2. Cross-Level Interactions

After the inclusion of the variable on contextual linkage and interaction terms of this variable with the contextual (level 2) variables, we see that some significant effects have vanished while other additional significant effects can now be detected. Among those effects that vanished now but had been observed in the direct level 2 effects Model (1) is the significant positive correlation between the contextual share of foreigners or the share of primary sector employees and preferences for the SPOe, respectively. These associations cannot be observed in Table 26 anymore, in which the marginal effects of contextual variables when contextual linkage is zero are presented (Model 2). We cannot observe any significant effect at all regarding preference towards SPOe once interactions of contextual variables with contextual linkage are introduced in Model 2. This indicates that direct level 2 effects on SPOe preferences are rather independent from the number of years a respondent already lives in her context.

Controls	SPOe	OeVP	FPOe	Greens	TeamS
Gender (ref. cat.: male)	0.0883 (0.116)	0.155 (0.108)	-0.278* (0.130)	0.516*** (0.118)	-0.265* (0.103)
Age	0.0203*** (0.00482)	-0.00130 (0.00451)	-0.0284*** (0.00542)	0.00129 (0.00490)	-0.0119** (0.00429)
Edu: finished secondary education (ref. cat.: up to secondary education)	0.0234 (0.248)	0.637** (0.234)	-0.675* (0.276)	0.495* (0.250)	-0.448* (0.219)
Edu: higher education (ref. cat.: up to secondary education)	0.107 (0.270)	1.166*** (0.255)	-2.061*** (0.301)	1.960*** (0.273)	-1.484*** (0.239)
Union Membership (ref. cat.: yes)	-0.772*** (0.141)	0.424** (0.131)	0.0449 (0.158)	0.0519 (0.142)	0.177 (0.125)
Occupation: civil servant (ref. cat.: employee)	-0.0525 (0.181)	-0.0105 (0.170)	0.379+ (0.204)	-0.428* (0.183)	0.124 (0.162)
Occupation: self employed (ref. cat.: employee)	-0.968*** (0.202)	0.252 (0.188)	-0.159 (0.226)	-0.534** (0.204)	0.0527 (0.179)
Occupation: in education (ref. cat.: employee)	0.826*** (0.213)	0.480* (0.201)	-1.437*** (0.239)	1.260*** (0.221)	-0.904*** (0.190)
Contextual Variables + Interactions					
Contextual Linkage	0.00173 (0.00375)	0.00478 (0.00350)	0.00440 (0.00422)	-0.00896* (0.00379)	0.000779 (0.00333)
Foreigners	0.0227 (0.0175)	-0.00895 (0.0167)	-0.00344 (0.0203)	0.0336+ (0.0178)	0.00181 (0.0151)
Contextual Linkage*Foreigners	0.000179 (0.000576)	0.000195 (0.000539)	-0.000523 (0.000649)	-0.000559 (0.000590)	-0.000500 (0.000512)
Gini Index 2011	-4.102 (4.385)	-8.032+ (4.180)	-11.04* (5.057)	2.698 (4.426)	-6.535+ (3.784)
Contextual Linkage* Gini Index 2011	0.127 (0.150)	0.350* (0.140)	0.0568 (0.169)	0.0364 (0.152)	0.0221 (0.133)
Share of 65+	-0.0156 (0.0534)	0.0651 (0.0505)	0.0150 (0.0615)	-0.00445 (0.0537)	0.0346 (0.0462)
Contextual Linkage*Share of 65+	0.00223 (0.00174)	-0.00308+ (0.00161)	-0.00175 (0.00195)	-0.00139 (0.00177)	-0.00238 (0.00154)
Share of Primary Sector	0.0585 (0.0518)	0.0202 (0.0491)	0.0617 (0.0596)	0.00643 (0.0526)	0.0726 (0.0447)
Contextual Linkage* Share of Primary Sector	0.000391 (0.00181)	0.000458 (0.00168)	-0.00391+ (0.00202)	-0.000305 (0.00184)	-0.00215 (0.00160)
Share of Catholics	0.00323 (0.00890)	-0.0133 (0.00865)	-0.0139 (0.0104)	0.0339*** (0.00893)	-0.00871 (0.00762)
Contextual Linkage* Share of Catholics	-0.0000016 (0.000313)	0.000310 (0.000294)	-0.000261 (0.000354)	0.0000646 (0.000317)	-0.000155 (0.000279)
Constant	3.727*** (0.341)	2.515*** (0.324)	5.221*** (0.383)	2.830*** (0.347)	4.023*** (0.302)
Var(RC)	1.16e-20 (8.72e-20)	.0354636 (.0415307)	9.95e-07 (.0002377)	.0050284 (.0459699)	3.68e-13 (4.90e-10)
Var (RC PD)	.0735404 (.0574882)	.0312657 (.0622491)	.1540422 (.0850619)	.0517072 (.0704261)	.0216893 (.0438185)
Var (residual)	8.11604 (.2419373)	6.982869 (.202293)	10.19412 (.2916946)	8.238259 (.2381093)	6.364399 (.1839926)
N	2533	2491	2534	2493	2507
Standard errors in parentheses +p<0.1 * p<0.05 ** p<0.01 *** p<0.001					

Table 26: Cross-Level Interaction Effects - Model (2)

The same is true for negative associations between contextual share of Catholics and lower preferences for the far-right FPÖ or the populist-right Team Stronach; after introduction of the interaction terms these effects cannot be observed anymore, indicating that there is no marginal effect of Catholic share when contextual linkage is 0. Again, one can assume that the negative effect of Catholic share on preferences towards these two parties is not moderated by the number of years a person is already living in the same context.

However, there is only one case in which we can observe both a significant marginal effect *and* an accompanying significant interaction term; this is the case regarding preferences for ÖVP and the association with the Gini Index 2011. This is especially interesting since there was no direct level 2 effect towards ÖVP preferences in Model 1. However, after introducing contextual linkage we see that the time respondents are already living at their spatial context moderates the effect of social inequality and preferences towards ÖVP.

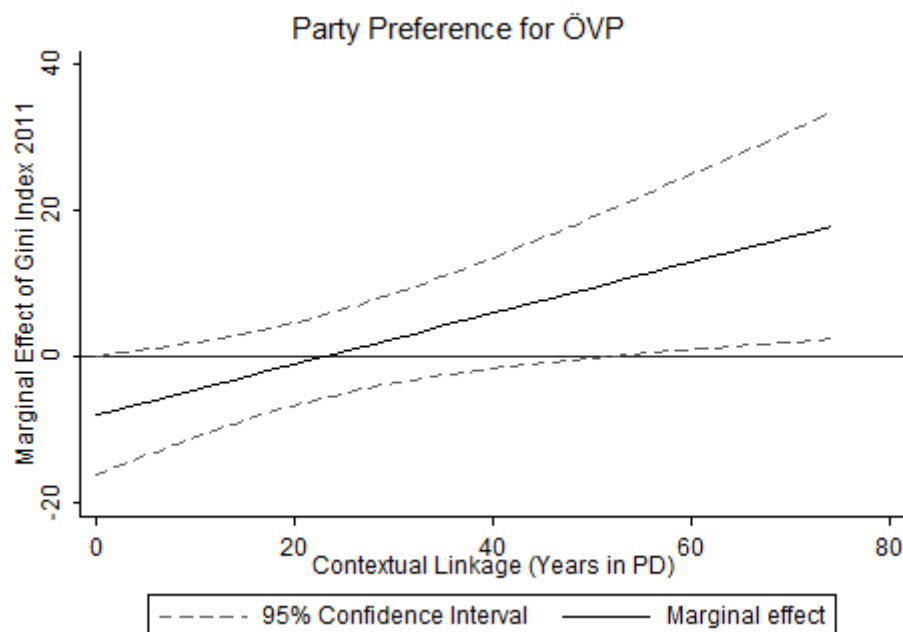


Figure 11: Marginal Effect Gini Index 2011 and ÖVP Preferences (over Contextual Linkage)

Here we see that the effect of social inequality on preferences for the ÖVP is negative for respondents who live below the average time (that is 22 years) in their PD: The higher social inequality was in 2011 the lower were their preferences for ÖVP in 2013. For respondents with an average amount of time living in the same PD, we see

no significant association between OeVP preferences and social inequality (see also Figure 29 in Appendix); regardless of the spatial extent of social inequality, its effect on preferences for OeVP is almost the same. But the longer these respondents had been living in the same PD the more positive the effect of social inequality on OeVP preferences get. Thus, we not only see that social inequality has an (negative) impact on preferences towards right wing parties (Table 24) but also that these associations between social inequality and preferences for right wing parties are partly moderated by the time respondents had been living at the same spatial context and can, finally, turn their direction.

One possible reason for this association could be found in respondents' professional careers: To live for 22 years in the same context, you have to be at least 22 years old in the first place. Thus, people that live an above average time in the same context are most likely older than those who do not live in the same context for 22 years.

Again, these young respondents maybe just moved into their apartment or house and might have to pay back a loan. However, these young people are also at the beginning of their professional careers, do make less money than older people in most cases, and are more likely to be affected by precarity in general. Thus, social inequality and the threat of being unemployed or being poor someday are more serious for these young respondents than for older respondents. Consequently, they should oppose parties that are against redistribution policies since these respondents most likely benefit from such policies in one way or the other (or at least hope that they will benefit from such policies in case they are in financial troubles).

This, however, could also explain the change in direction of the contextual effect of social inequality: Once you are young, social inequality is a real threat and preferences for OeVP, a conservative party who does not stress social welfare policies, are low. However, once people get older, they (hopefully) are not affected by precarity anymore and preferences towards OeVP get stronger. In short; contextual linkage and its interaction effects is maybe rather a proxy for age and possible interactions with age than a proxy measure for actual contextual linkage. Consequently, the change in direction of contextual social inequality influence might be a life cycle effect.

Apart from this interaction, as already said, there are no additional pairs of significant interaction effects and marginal effects of social contextual variables. Even though we see that there still is a correlation between social inequality and preferences for FPOe that indicates that the higher social inequality is the lower are preferences for FPOe for every extent of contextual linkage (see Figure 30), there is no cue that this association is actually moderated by contextual linkage (see Figure 12). Similar can be said regarding the other marginal effects presented in Table 26.

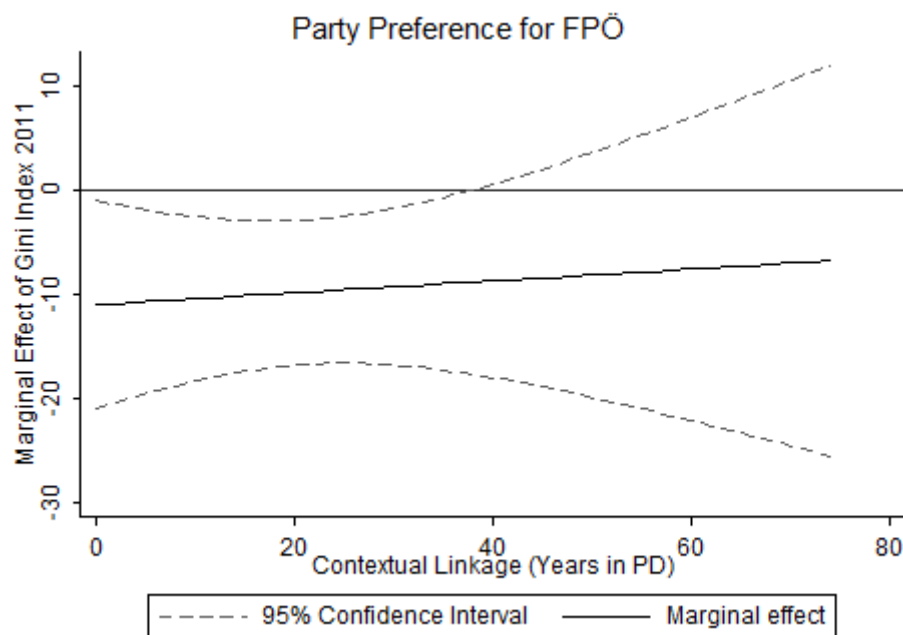


Figure 12: Marginal Effect Gini Index 2011 and FPOe Preferences (over Contextual Linkage)

Finally, we can investigate whether the hierarchical modelling of data is doing a significantly better job than using ‘regular’ one-level models. Compared to Model 1 without cross-level interactions, the overall picture of Table 27 basically remained the same: While the hierarchical approach clearly did better regarding FPOe, this is not the case regarding the other parties. This now also applies for OeVP with a p-value of about 0.20.

	SPOe	OeVP	FPOe	Greens	TeamS
Chi ²	2.36	3.15	6.07	1.22	0.28
p-value	0.3067	0.2072	0.0482	0.542	0.8713

Table 27: Likelihood-Ratio Tests - Model (2)

After investigating direct level 2 effects of the social context and cross-level interactions with social contextual variables and contextual linkage, we can again have a closer look on the random parts of the models presented in this chapter. This will help to evaluate the amount of explained variance on each level of every model. After that the hypotheses regarding social contextual influence are discussed in detail in this chapter's last section.

6.3.3. Random Effects

In order to evaluate the relative importance of each analytical level, variation partition coefficients (VPC) are calculated again.⁴⁸ However, we will only distinguish between the control variables only models (that had not been set up again in this chapter since the control variables used did not change between this analysis and the analysis of economic context, see Table 14), the direct level 2 effects models (Model 1, Table 24) and the cross-level interaction models (Model 2, Table 26). Interpretation of VPCs are straightforward since these coefficients only show how much individual variation can be ascribed between RCs (RC), within RCs but between PDs (RC|PD) and between respondents but within PDs (Residual). This information can then be used to evaluate the importance of each analytical level for every party and the models used in this analysis.

⁴⁸ See section 5.4.4 for calculation and formulas.

	SPOe	OeVP	FPOe	Greens	TeamS
<i>Model 0</i>					
RC	0.00000	0.00612	0.00576	0.01066	0.00018
RC PD	0.01021	0.00937	0.01897	0.0167	0.01553
Residual	0.98979	0.98452	0.97527	0.97264	0.98429
<i>Model 1</i>					
RC	0.00000	0.00508	0.00000	0.00000	0.00000
RC PD	0.00854	0.00708	0.01555	0.00652	0.00397
Residual	0.99146	0.98784	0.98445	0.99348	0.99603
<i>Model 2</i>					
RC	0.00000	0.00503	0.00000	0.00061	0.00000
RC PD	0.00898	0.00444	0.01489	0.00623	0.00340
Residual	0.99102	0.99053	0.98511	0.99316	0.99660

Table 28: VPCs Social Context Models

What had already been presented in the likelihood-ratio model fit tables above can also be seen in Table 28: In this table, we see that party preferences for the FPOe can be better explained using social contextual variables than the preferences for every other party. But we also see why that is the case: Even though the contextual share of variance is still rather small for FPOe (with 1.6 per cent in Model 1 and 1.5 per cent in Model 1 within RCs but between PDs, respectively), these shares are still the largest shares of contextual variation of all parties. Consequently, since variation can be described better using a hierarchical structure, hierarchical modelling of FPOe preferences is also doing better in explaining FPOe preferences than single-level models would do. However, this is not the case regarding preferences towards the other parties included in this analysis.

Additionally, we can also see that OeVP is the only party with a considerable amount of variation on the RC level while other parties (except for the Greens in Model 2) show almost no contextual share of variation on that level. This, however, indicates that contextual impact on RC level is only relevant for OeVP while being rather unimportant for other parties. Additionally, the PD level is slightly less important for OeVP than it is for SPOe or FPOe.

Apart from that, we can again conclude that the lion's share of variation still is present on individual level 1, while level 2 and especially level 3 variation is rather small. However, only looking at the governmental parties SPOe and OeVP and comparing these results with those of the economic context, we see that the social

context is doing slightly better than the economic context in the contextual explanation of party preferences for these two parties.

6.4. Summary and Discussion

So, what have we learned about social contextual influence on party preferences in Austria? As we have seen, there are two contradicting theoretical approaches for answering the question of the impact of immigrant share on anti-immigrant attitudes and party preferences. The findings presented here are more in favour of Allport's contact hypothesis than group threat theory: There is no evidence that a high contextual share of foreigners is associated with higher preferences for far-right parties. To the contrary, there is evidence that a high share of foreigners is correlated with preferences for left-wing parties; in this case SPOe and the Greens. However, one possible alternate explanation for that could be found in another spatial factor that is segregation of immigrants within the country: PDs with a high share of foreigners are usually also PDs with a high level of urbanisation, or comparatively large cities. In these PDs, there might be also other non-contextual reasons for higher preferences towards left-wing parties such as a younger population, a higher educational level...etc. However, by now we see that H1a can be rejected while we cannot reject H1b that is in line with the contact hypothesis.

In the next pair of hypotheses, H2a and H2b, it is assumed that contextual social inequality influences party preferences across the left-right dimension and according to whether parties oppose or support redistribution policies. While there is no evidence that high contextual social inequality is correlated with preferences for left-wing parties, we see that there is a negative association regarding two (out of three) right-wing parties. Thus, H2a can be rejected while we should keep H2b: Preferences for right-wing parties are lower the higher contextual social inequality is. Thus, one can assume that people that experience social inequality day-to-day are not necessarily in favour of left-wing parties (that might tackle this issue) but are on average not in favour of right-wing parties that reject redistribution policies and the welfare state: They do not want to solve the issue of social inequality by redistribution policies, however, but they do not want things to become worse either.

Next, the impact of the contextual share of elderly or the 'grey vote' had been investigated in hypotheses H3a and H3b. However, both hypotheses can be rejected:

There is no evidence that comparatively old spatial contexts influence respondents in their party preferences towards the preferences of older voters.

Similar can be said regarding hypothesis H4. In this hypothesis, it is assumed that a high share of workers and employees in the primary sector is associated with higher preferences for the conservative OeVP. However, there is no evidence that this is true. On the contrary, a high share of primary sector workers and employees is associated with higher preferences for SPOe, a left-wing party deeply rooted in the secondary production sector. So, we must also reject H4 and keep in mind that regarding the contextual impact of the primary sector, there is a quite spurious result.

But, as already mentioned, it is also possible that people who are not working in the primary sector are influenced by a high share of primary sector workers and employees in such a way that their preferences towards other parties (in this case SPOe) become even stronger. They do so since they think that this might be the only way that their claims and needs are represented, due to the strong conservative electorate in their context. So, this hypothesis (and also the spurious result that becomes less spurious once you look closer into it) deserves further investigation, especially regarding the preferences of those who are not associated with the primary sector but do in fact live in a context with a strong primary sector.

In H5a and H5b it was hypothesised that contextual religiosity, i.e. the share of Catholics, influences party preferences towards conservative parties and anti-clerical parties; in this case OeVP on the one side and SPOe and FPOe on the other side, respectively. However, findings are again quite mixed: While there was no significant positive influence on OeVP party preferences (but on preferences for the Greens), there is also no significant negative influence on SPOe party preferences neither.

Nevertheless, there is a significant negative association between contextual share of Catholics and FPOe preferences; the higher the share of Catholics is in a PD, the lower preferences for FPOe are on average. Thus, H5a can be rejected while H5b cannot be rejected, even though further analysis regarding the (non)significant impact on SPOe and FPOe preference should be conducted.

One reason for these different results regarding SPOe and FPOe could be that even though both parties are anti-clerical in their tradition, the far-right FPOe is (at least today) more in conflict with Christian principles than SPOe; e.g. regarding the

treatment and care of refugees. In this field, there are many left-wing organisations as well as organisations associated with the Catholic Church involved, however, FPOe opposes refugees and NGOs involved in their care. Additionally, the link between SPOe and the Catholic Church could also be found in Catholic social teaching while there is no such link to FPOe and its policies.

Finally, H6 hypothesised that individual contextual linkage reinforces direct level 2 effect of the social context. Even though there was a significant interaction effect between contextual linkage and preferences towards OeVP, this is not exactly true since the direction of this impact turns its direction: The longer respondents are already living in the same PD, the more positive the impact of a high share of social inequality towards OeVP gets (see above). Consequently, H6 can be rejected by now since there is no reinforcing effect of contextual linkage.

Another thing that was presented is the fact that also regarding the social context, PD level impact is stronger than the impact on RC level: While the share of individual variation that can be assigned to the PD level is not very large, this share is very small on RC level. Therefore, we can again see that the lower level of PD is more important regarding social contextual influence than the higher level of RCs, even though the individual level is still the most important factor that influences party preferences towards the Austrian parties running for election in 2013.

Summing up and answering the research question on the influence of social context on preferences towards different parties, the answer is not clear. Since some results point in another direction as it had been assumed in some hypotheses, one could think that contextual impact sometimes influences voters in such a way that they must stick closer together in order to be heard (as they oppose the views and position that are dominant in their context). Thus, one answer to the question who is especially responsive to contextual influence could be that those holding minority views are especially responsive to contextual influence since they react with higher cohesion to contextual influence of opposing states of mind. However, some results also supported the hypotheses that had been investigated in this chapter, e.g. regarding the influence of Catholics on FPOe preferences or immigrant influence on preferences towards immigrant-friendly party such as SPOe or the Greens (and, thus, supporting Allport's contact hypothesis). Thus, another answer to the question what the impact of varying social context on political behaviour is could be that it depends

on the actual component of social question: Not every part of the social context (as it had been defined in this study) is also important in shaping political behaviour. In fact, some components of social context seem to be influencing political behaviour while others (e.g. the influence of contextual age) are not important at all.

7. The Media Context

While conceptualising contextual effects of the economy (the economic context) or socio-demographic structure (the social context) is quite straightforward, this is not the case regarding this thesis' last analytical chapter that addresses the media context and its influence. The reason for that is that both the economy and population are clearly bound to space and, thus, can easily be regarded as contextual (that is spatial) factors: The economy consists of companies, job vacancies and unemployed, inflation...etc.; all these factors are located in space in one way or the other. Economic development and the state of the economy also differs by place and contextual effects of the regional economy can be comparatively easily hypothesised.

The same is true for the population that is located in space: Its composition regarding age, occupation, migration history...etc. also differs by place and can be regarded as a source of contextual impact on voters. This, again, is made possible through regionalisation of context and the population that lives in this spatial context. Social and economic contextual effects had been discussed and analysed in earlier chapters (see chapter 5 and chapter 6).

Now it is time to turn to the last contextual analysis and the media context. The media is not bound to place in the same way as the economy or population are: Mass media outlets are usually available across different contexts (that is places) and mass media reporting covers (except for small regional media outlets) events that happen in different contexts (and countries). Nevertheless, this thesis' last chapter deals with media contextual influence on individual evaluations of and preferences for political parties and aims to answer the research question *what is the impact of the media context on individual party preferences?*

However, since the phenomena of mass media is not spatial or at least less spatial than the economy or social structure are, it must be bound to space first to analyse its contextual impact on the individual level of voters. Thus, we need to make mass media contextual. Before that, it should be sketched out how mass media can influence its consumers in their political preferences and party evaluations and what factors might reinforce this media impact.

Of course, mass media reports about places, media outlets are produced at certain places and circulation of mass media outlets differs by place. But its reporting (which is assumed to influence voters) and impact crosses spatial borders and boundaries:

The same newspapers are available at most places across the country, television and radio broadcast can also be received throughout the county; and if we take the internet into account, we see that internet news media but also some television and radio broadcast reaches readers, viewers, and listeners across the globe.

This availability of news media makes it harder to incorporate the media in the framework of contextual analysis: If a phenomenon is not bound to place, how can it be regarded as a spatial (that is contextual) factor? The answer can be found if we have a closer look on the fact that circulation and popularity of media outlets differ by place as well as reporting of mass media differs by media outlets. The latter is the first step in the analysis of media contextual effects.

7.1. The Media Context: Content and Conversation

If we keep in mind that not every media outlet reports in the same way on the same events, this means that characteristics of mass media outlets' reporting (or their stories in general) must be analysed before the actual contextual analysis takes place. However, it also means that mass media might not only deliver objective information to its recipients but that its content is sometimes unbalanced or more or less favouring a party or candidate during an electoral campaign (see e.g. Hopmann, van Aelst, & Legnante, 2011). This phenomenon is also called 'media bias'.

Media bias can have many faces, various forms, and names: While D'Alessio and Allen (2000) distinguish between so-called 'gatekeeping bias', 'coverage bias', and 'statement bias', Eberl, Boomgaarden, and Wagner (2015) prefer the labels of 'visibility bias', 'agenda bias', and 'tonality bias'. Regardless of whether the taxonomy by D'Alessio and Allen or Eberl, Boomgarden and Wagner is applied, the latter type of bias – statement bias or tonality bias – is crucial for this analysis of media context.⁴⁹

Tonality bias addresses that fact that mass media seldom acts solely as neutral observer but rather also includes evaluations of politicians, parties, other political actors...etc. as either good or bad (or neutral, of course) in its reporting. Thus, tonality of news reporting targets an qualitative aspect of media coverage that might influence readers in their evaluation of political parties (see Eberl et al., 2015): In case a reader mostly consumes newspapers that evaluate e.g. the governing party or

⁴⁹ In the following, only the label of 'tonality bias' will be used for describing differences in mass media regarding the way *how* they report about political actors – in this case parties running for the 2013 Austrian national election.

governing parties as extremely negative, she might also get a negative view on this party or parties. Using the information on average tonality bias for every media outlet that is available at a place helps us to construct this context's aggregate tonality bias (see below). Voters, then, are exposed to that biased media context regardless of their own media exposure but corresponding to their spatial location and the popularity of mass media outlets at this place.⁵⁰

So the central idea and theoretical consideration of this chapter reads as follows: Different mass media outlets report different stories ('visibility bias', see Eberl et al., 2015) or report about the same events to a variable extent ('agenda bias', *ibid.*) or in a different way ('tonality bias', *ibid.*). Especially the last type of bias, that is tonality bias, seems to be important for party preferences since this type of bias targets the fact that a qualitative evaluation of political actors is sometimes included in media reporting. Thus, the content of media outlets is different from each other regarding the amount, way, or selection of reporting and stories.

But voters are exposed to mass media and its reporting in two different ways – the individual *and* the contextual level: First, voters are differently exposed to that varying mass media reporting on the micro-level depending on how often they consume a media outlet. Second, they are also differently exposed to media reporting on the contextual level that is dependent on their amount of personal discussion with others since it is assumed that personal discussion transmits contextual mass media information to voters (Berelson et al., 1954; Katz, 1957; Katz & Lazarsfeld, 1955; see also Schmitt-Beck, 2003). Thus, personal discussion not only transmits media information to others but also links voters with the spatial media context since the media context is constituted by the mass media outlets (and the information provided by these outlets) that others living in the same spatial context consume.

The content and characteristics of the media outlets available across different places and their market shares, however, help us to determine the media context per se: First, we need to know how different mass media outlets report about different political actors (that is, we need to determine the tonality bias provided by different mass media outlets). Then, we should have a closer look on how popular the various mass media outlets are across different places in order to assess how the media

⁵⁰ Additionally, individual tonality bias and its impact can and should also be investigated by using information on individual media consumption and the content characteristics of regularly consumed media outlets.

context is constituted. E.g. if one media outlet that is very much in favour of party ABC is very popular at one place while another media outlets that is not in favour of ABC but rather its rival party DEF is less popular at the same place, then this places' media context should (because of the higher popularity of the first media outlet) also be more in favour of ABC. But why should the mass media that others consume influence one's own political behaviour or political views in the first place? The answer to this question can be found in some 'classic' studies of electoral research.

7.1.1. Personal Interaction and Media Contextual Effects

We know that people talk with other people. However, they not only talk about their *own* personal experiences and things they saw or experienced first-hand but also about things they *watched, read, or listened to* in the media. Thus, when it comes to politics and personal discussions about politics, they seldom refer to said first hand experiences but are rather likely to talk about (political) information that they received through the media. Additionally, while talking about the news with others, evaluations and opinions about parties and candidates might be added to the information provided by mass media (Schmitt-Beck, 2003). The spatial media context (that is the aggregated information and its bias that is available at a context), however, seems to be a good proxy measure for the mass media information that voters are most likely to share with others (even though we seldom have information on what voters actually talk about with each other).

Interaction with others and the information they receive through this interaction with others influence voters' individual behaviour in the following. So, in order to be influenced by mass media a voter does not necessarily have to read, watch, or listen to the news *by herself* and receive its information first-hand. Instead, it might be sufficient to talk with others about the things *they* have read, watched, or listened to in the news to be influenced by mass media context.

The idea that voters are *indirectly* influenced by mass media through interaction with others (who pass on the information they received) is everything but new in political science research. In fact, it belongs to the foundation of modern electoral research: These considerations of indirect media influence started in the early days of electoral research and as result of the classic studies by Lazarsfeld, Berelson, and Gaudet (1955), Katz and Lazarsfeld (1955), and also Katz (1957) on two-step (and multi-step) flows of information and so-called 'opinion leaders'.

In these (and other) studies, it is assumed that especially late deciders in political campaigns and those who change their mind during a campaign are more influenced by personal discussion than others who do not show this behaviour. The people who might influence these voters are labelled as so-called ‘opinion leaders’ who not only show high levels of mass media exposure but also pass on the information they receive to others who are less exposed to mass media (Katz, 1957). By doing so, mass media information even reaches voters with comparatively low levels of media consumption.⁵¹

In a more recent study Schmitt-Beck (2003) investigates the moderating role of political discussion in greater depth. In this study, he finds evidence that the influence of political discussion on mass media effects is dependent on the composition of a voter’s discussion partners: If a voter’s social environment is homogenously consistent with mass media reporting, she will accept and adopt this information. If a voter’s social environment and political discussion network is not overwhelmingly in line with the information provided by mass media, the information it provides is likely to be rejected. So, we see that it not only depends on the question whether political discussion with others takes place at all but rather also with whom the news is discussed.

Summing up, the *amount of personal discussion with others* about politics in which cues and information (from the media but also from other sources) are transmitted and supplemented from one to another is, besides tonality bias in mass media and the resulting media context, crucial in this chapter. By using information on the amount of personal discussion with others about politics it is possible to use this information as a proxy measure for individual exposure to the media context: The more respondents talk with others about politics, the more they are exposed to the media context (since these others consume the media outlets available at this context and, by doing so, constitute the media context in the first place). Conclusively, voters with high levels of personal discussion should also be strongly influenced by media context and, thus, personal discussion moderates the effect of the media context.

This does not mean that the media context *includes* personal (or even impersonal) influence of others but rather that personal discussion *links* the media context with

⁵¹ This classic theories on opinion leaders and the two-step flow of information had also been criticised and adapted since then; e.g. that the function of opinion leaders lies in the supplementary relaying of information and the contribution of additional information, correction of false information...etc. (see Deutschmann & Danielson, 1960).

voters as most important mode of transmission of media contextual impact. Such a conceptualisation of media context as personal or impersonal social influence would rather be a slightly different conceptualisation of what had been investigated as ‘social context’ earlier in this thesis or what had been described by Sinclair (2012). Instead, the media context is operationalised as an aggregate measure of mass media reporting (and its tonality bias). Because media context is an aggregate measure, it is *constituted by others* and their behaviour in the first place. And, consequently, by talking with these others, the (aggregate) media context is transmitted from one voter to another.

Thus, in this chapter, the media context is operationalised as the *spatial dependent total media supply* at a specific place, including the *qualitative evaluations of tonality bias* that nearly every media outlet has. This media context is *constituted by others who consume these media outlets* in the first place. By *talking about politics* with each other, however, cues provided by the *media context are passed on* to the individual. This operationalisation of media context will be discussed and presented in more detail in the next section.

7.1.2. Media Context and the Information Environment

We have seen that mass media’s tonality bias might influence people in their political behaviour and attitudes. Additionally, it has been sketched out why and how contextual information is passed on between individuals by taking the classic theories on two-step (and multi-step) flows of information into account. In this theory it is assumed that so-called ‘opinion leaders’ share and pass on mass media information to others (Katz, 1957). By doing so, tonality bias and media contextual information are also passed on to others. What we do not know yet, however, is what can be actually understood as the media context per se and how it can be operationalised? This shall be achieved in this section.

Media context in specific and context in general is, as it has been operationalised throughout this thesis, a spatial phenomenon. As it had already been stated, mass media is not bound to space in the same way as other social and economic phenomena are. However, introducing place and contextual effects in mass media can be achieved by considering that even though mass media outlets are available throughout the country, their popularity is not the same but spatially contingent instead. Conclusively, the tonality bias of different media outlets is more present at

one place than it is at other places since the same is true for the different media outlets.

So, it can be hypothesised that the media context that a voter experiences also differs by place because the popularity of different mass media outlets also varies across place. Depending on how many people consume a media outlet and how popular this outlet is at a specific context, the mass media context a voter experiences at a specific place is also different: Voters receive different cues and information depending on where they are located and the media context they experience is actually spatial. But what actually is the media context?

The answer can be given in case we define the media context as being the ‘information environment’ (Hopmann, Vliegenthart, De Vreese, & Albæk, 2010; see also Jerit, Barabas, & Bolsen, 2006) that a voter experiences. The term of ‘information environment’ addresses the fact that people do not necessarily have to intentionally seek the mass media information they receive. Hopmann et al. (2010) give a nice definition of the ‘information environment’ by describing it as “an aggregation of media content characteristics (such as visibility and tone) of some of the widely used media sources within a certain context. These measures can be considered proxies for the information that is available in this context.” (Hopmann et al., 2010: 392). If we keep in mind that we define ‘place as context’ (Staeheli, 2003); the phrase of ‘information environment’ introduced by Hopmann et al. (2010) describes the mass media information that is available and circulating at specific places – or short: the mass media context of a certain place.

Summing up, we know that the *media context is the aggregation of media content* that is available at a specific place. Furthermore, we also know that this media context differs by place since the media and its market shares are also place specific. If e.g. the newspaper ABC is very popular at a specific place, I would assume that the reporting and stories of ABC are more ‘available’, more ‘present’, and more ‘dominant’ at this place as well. So, this regional media context is characterised by the information and content characteristics provided by newspaper ABC. If newspaper DEF is more popular than ABC at another place, I would expect DEF’s stories and reporting to be more popular at this other place as well.... etc.

Media contextual effects, then, result from these differences in popularity of media outlets: Individuals will be influenced by the information the mass media provides. However, the contextual influence of this specific newspaper will be stronger

(weaker) the more (less) popular this newspaper is. By doing so, the media context also gets bound to space and contextual analysis is enabled.

7.1.3. Modes of Transmission and Mass Media Information

A voter might receive mass media information in two different ways: First, she might personally consume mass media by reading the newspaper(s) of her choice, watching the news broadcast(s) in the evening, or visiting news websites on the internet. These effects of individual media consumption can be regarded as *direct effects* of mass media; a voter reads, hears, watches something in the news and then probably reacts to that information.

Second, mass media messages and reporting might also reach her in another way since other people – her neighbours, her colleagues, or her spouse – also consume mass media. Moreover, they not only consume the mass media of their choice in isolation but also discuss the information provided by mass media with each other (Schmitt-Beck, 2003). These *indirect effects* of mass media information (that is not intentionally sought by voters) can be regarded as the *contextual effect* of mass media. A voter does not necessarily have to personally consume mass media in order to receive mass media information; instead “[...] they obtain the information in a serial, cumulative fashion as a collection of responses, unsolicited opinions, offhand comments, and occasional heated arguments. In short, the process of social communication regarding politics constitutes a virtually endless series of discrete encounters between individuals and the associates with whom they share a social space.” (R. Huckfeldt, P. E. Johnson, & J. Sprague, 2005: 30).

Thus, a voter can receive mass media information either *directly* or *indirectly*. The latter case, however, can be described as indirect or *contextual media influence*: Even though a voter does not personally consume the news, other people might talk with her about the news that *they* have read, watched, or listened to. Since this media context is transmitted to voters through interaction with others, its impact is supposed to be stronger for those who talk a lot with others about politics (because they necessarily receive more information about the media context the more they talk about it with others). The media context per se, however, is operationalised as mean tonality bias of all available media outlets that becomes spatially contingent once different popularity of media outlets across different spatial context is considered. Thus, depending on the varying popularity of mass media outlets across different contexts, the media context varies across contexts too.

We see that even though the theoretical foundation of this chapter basically remains the same as in previous chapters with an information flow and processing approach, the modes of transmission of media contextual effects to the individual are somewhat different regarding the media context. In the information flow and processing theory (outlined earlier in this thesis, see chapter 2) it is assumed that people receive information about their context through different channels; personal observation, informal interaction or interaction with locally based institutions, or mass media consumption. Regarding the media context, the case is a little bit different.⁵²

Since media contextual effects can be described as indirect media effects that mostly result from sharing mass media information with each other, special attention should be given to acts of informal interaction with other people. By talking about politics with others, mass media information is passed on and so it is sometimes even assumed that the content of the media context is mainly transmitted through interaction with others (Boulay, Storey, & Sood, 2002; see also Katz, 1957). After all, it is other people that consume mass media outlets that constitute the media context.⁵³

Regarding the contextual analysis of this chapter this means that contextual effects shall be investigated separately for groups with different amounts of informal interaction and political discussion. Contextual impact, conclusively, should be weaker (stronger) the less (more) people talk with others about politics. So this chapters' data analysis will be conducted by dividing the total sample into different subgroups corresponding to their different amounts of political discussion. Then, these groups will be analysed separately and compared with each other in order to investigate the influence of political discussion on media contextual effects (see below). By doing so, a thoroughly analysis of media contextual effects is enabled.

⁵² At first glance, it looks reasonable to look at media consumption to investigate media contextual effects. However, doing so would mean to only look on *direct media effects* that most likely target other contextual effects than those resulting from the media context; e.g. a local newspaper's reporting on the local economy that basically belongs to the field of economic contextual effects. Media contextual effects, however, cannot be transmitted by individual media consumption or the media itself; in fact, it is other people consuming media outlets that constitute the media context in the first place. By talking about this mass media information with others, they transmit this contextual media information to others.

⁵³ However, the effect of personal discussion on the impact of media influence on political behaviour is not restricted to contextual (indirect) media effects: Informal interaction and talking about politics with others might also reinforce direct media effects, see Scheufele (2002).

7.1.4. State of Research

Most contemporary studies look on media effects as individual-level direct effects which makes it hard to find appropriate literature on indirect media effects and media contextual impact. However, there are at least some studies (to my knowledge) that address contextual effects of mass media or the effects of personal discussion and mass media.⁵⁴ Interaction effects of personal discussion and mass media consumption had also been investigated in various studies (e.g. de Vreese & Boomgaarden, 2006; Katz & Lazarsfeld, 1955; Schmitt-Beck, 2003).

The findings of Schmitt-Beck (2003) had already been summarised in short. However, the fact that the composition of a voter's discussion network moderates the influence of mass media information should be emphasised in this wrap-up and the following analyses: Depending on the composition and dependent on whether discussion partners favour or oppose mass media information, the effect of mass media messages is different. So, it is not only important whether people talk about mass media information at all but also with whom they discuss the thing they watched, listened to, or read in the media.

Regarding studies on contextual effects of mass media on individual behaviour Hopmann et al. (2010) show that effects from the 'information environment' (that is the media context) on party choice had been relevant for all voters in the 2007 Danish campaign (even though its relevance varied across different groups of voters).⁵⁵

In this study, Hopmann and his colleagues used a rolling-cross-section survey (RCS) and content analyses of the four major news bulletins in Denmark for investigating the effect of the 'information environment' on respondents. Due to the special survey design of RCS studies it is possible to investigate short term changes and developments in public opinion during an electoral campaign (see Richard Johnston & Brady, 2002). This had been done by Hopmann et al. (2010) by operationalising the 'information environment' as the average media coverage in these four major news broadcasts during the last five days before the interview with the respondents took place. Thus, they do not operationalise 'context' from a spatial perspective (by

⁵⁴ Even though most of these studies do not look into the effects of biased media reporting or use another operationalisation of what can actually be regarded as 'context' or 'contextual effect'

⁵⁵ However, Hopmann et al. (2010) operationalised context not from a spatial point of view as in this study but rather from a temporal perspective, see below. Nevertheless, the aims of both studies are still somewhat comparable with each other.

taking different geographic locations into account) but from a chronological perspective (by taking different dates of interviews into account), however, the underlying aim of their study and this thesis are still quite similar.

In the following, they computed daily averages of party visibility and tone to get a (temporal) contextual measure of the media context respondents were exposed to during the last five days. These contextual measures, then, were attached to every respondent in the accompanying individual-level data set. This was done in accordance to the time of interview but regardless of their own media consumption since the assumption was that every respondent that was interviewed on the same day was equally exposed to the (temporal) media context. Individual-level media data (and the corresponding information on biased reporting) was only attached to the respondent data according to their own media consumption and only if they reported watching at least one of the news broadcasts (see Hopmann et al., 2010).

However, one shortcoming of this study (regarding the planned investigation of this thesis) is that personal discussion with others, the main mode of transmission of media contextual effects that might reinforce this contextual effect, had not been taken into account in the research design.⁵⁶ Nevertheless, the study by Hopmann et al. (2010) can be regarded as a very useful starting point for this analysis of spatial media contextual effects.⁵⁷

7.2. The Media Context: Data and Hypotheses

7.2.1. Hypotheses

In contrast to the analyses of economic and social context, there will be no party specific hypotheses in this analysis of media context. The reason for that is that media context operates differently than economic or social context does: While it can be easily hypothesised that unfavourable economic contextual variables might lead to unfavourable party preferences towards governmental parties or that e.g. a

⁵⁶ And, of course, that context is defined from a temporal perspective instead of a spatial point of view.

⁵⁷ A similar operationalisation of media context (that had been again named the ‘information environment’ and also addresses a temporal context instead of spatial context) can be found in Jerit et al. (2006). In this study, content analysis of national media outlets was conducted during the six weeks before a survey took place. Then, using this information on temporal media context, they show that an increase in newspaper reporting especially increases knowledge of the most educated about the investigated issues and, by doing so, widens the knowledge gap between highly and less educated respondents. This, however, is another evidence for the importance of (in this case temporal) media context on individuals.

comparatively older electorate influences young voters to prefer the same parties they like, this cannot be done regarding the impact of the media context.

The contextual variable used in this analysis is the contextual (aggregated) tonality bias of available mass media outlets. Tonality bias addresses political parties as either ‘good’, ‘bad’, or ‘neutral’ on average and it must be assumed that every kind of evaluation influences every party in the same way: A negative evaluation of party A has the same impact on party preferences for this party as a negative evaluation of party B has on preferences for B...etc. Thus, and referring to Eberl et al. (2015), the first hypothesis regarding the impact of tonality bias is:

H1: The more positive individual tonality bias in newspaper reporting is the higher is the propensity to ever vote for political parties (PTV).

Even though this first hypothesis does not address contextual effects, it is a necessary starting point for the investigation of contextual tonality bias. In case the results show that tonality bias does not have any influence at all on individual level, its possible impact on contextual level could be hardly assumed as well. In addition, it is not only assumed that the *individual exposure* to newspaper tonality bias influences the propensity to vote (PTV) for the parties running for election but also that the *contextual tonality bias exposure* influences PTV, regardless of individual media consumption and bias exposure. Let us assume that one newspaper is very much in favour of party ABC (and, thus, has a strong positive tonality bias towards party ABC) and is very popular at one context so almost every voter living there regularly reads this newspaper. An undecided voter named Jane Doe does not read this newspaper but, however, will still be influenced by its reporting since she receives the information (and bias) from this newspaper through others. This leads to the second hypothesis...

H2: The more positive contextual tonality bias in newspaper reporting is the higher is the propensity to ever vote for political parties (PTV).

Finally, it is also assumed that exposure to the media context and its impact are dependent on political discussion with others since interaction is one of the most important modes of transmission of the media context (see e.g. Katz, 1957; Katz & Lazarsfeld, 1955). The more Jane Doe talks with others about politics, the more tonality bias resulting from this newspaper she will receive and, in consequence, the more in favour of party ABC she might be. So, the amount of political discussion with

others can and will be used as a proxy measure for exposure to media context and, thus, the third hypothesis on the media context reads as follows:

H3: The impact of contextual tonality bias is dependent on the amount of political discussion with others; the more people talk with other people about politics the stronger is the impact of the media context (that is contextual tonality bias).

Additionally, and referring to Schmitt-Beck (2003), it is also assumed that it not only depends on the *amount* of political discussion but that the *composition of discussion partners* also plays a role regarding the impact of the media context on individual party preferences. Conclusively, the last hypothesis is...

H4: The impact of contextual tonality bias is dependent on the composition of the political discussion network; the more homogenous this network is (regarding their voting behaviour) the stronger is the impact of the media context (that is contextual tonality bias) – et vice versa.

To analyse H3 and H4, separate analyses of different subgroups must be conducted. This means that the same analyses including the same variables will be made, but the total sample will be divided into subgroups with varying amounts of political discussion or different extents of homogeneity regarding their discussion partners. Except for this split in the sample, everything regarding model specifications remains the same. Even though this kind of analysis is different than usual analysis of interactions between variables, it is necessary since the data structure is a little bit different than in usual cross section data analysis (see below). By doing so, interaction effects of media context and individual-level variables (in this case frequency of political discussion and homogeneity of discussion partners) can still be investigated by looking at differences between the investigated groups.

7.2.2. Media Contextual Data

As already sketched out, to investigate media contextual effects, we need both data on the content of media outlets on the one hand and on spatial distribution of mass media outlets on the other hand.⁵⁸ For the case of Austria studied in this thesis, both data is available and, thus, contextual analysis of the media can be conducted.

⁵⁸ And, of course, individual level data that is linked with media contextual data for investigating the impact of media context on respondents.

However, as always there are some limitations because of some shortcomings regarding data availability.

One limitation of this study might be the necessary exclusion of other media outlets than daily newspapers since online news media, radio and television news broadcast, and virtual social network content will not be included. The reason for that is that data availability on other media outlets than newspapers is limited in two ways: First, the AUTNES Manual Content Analysis of the 2013 Austrian National Election Coverage (Eberl et al., 2016; Kleinen von Königslöw et al., 2016) only includes information on the most important daily newspapers and television news broadcast in Austria.⁵⁹ Other media outlets such as radio broadcasts, weekly magazines, or online news media are not or not to the same extent included in this dataset. However, as described above, information about media content is crucial in the investigation of media effects and media context to determine a media outlet's tonality bias and, finally, a media context's bias.

Even though this limitation to print news media is still undesirable, it is also rather unproblematic since print news media still is (one of) the most important source(s) of news in Austria. In the AUTNES Online Panel Study (Kritzinger et al., 2016a, 2016b) used for analysis in the chapters on economic and social context, the shares of almost daily use of various news outlets for being informed about politics are 39 per cent (print news media), 39 per cent (TV news broadcast), 28 per cent (internet news media), and 32 per cent (radio news broadcast). Thus we see that even though analysing only print news media in this study might be a minor limitation to its conclusions, the most important source of political information in Austria is still included (see also Hallin & Mancini, 2004).

Second, there is no information on regional market shares of TV or radio broadcast or internet news media use. Thus, contextual information (that is the information on spatial variation and distribution) of other news media than print news media is missing, and media contextual analysis can only be conducted for print news media. This information on regional market shares of different Austrian newspapers is provided by the Verein Arbeitsgemeinschaft Media - Analysen (2013) on state level (*Bundesländer*; N=9).

⁵⁹ The newspapers included in this study are *Der Standard*, *Die Presse*, *Salzburger Nachrichten*, *Neue Kronen Zeitung*, *Österreich*, *Heute*, *Kurier*, and *Kleine Zeitung*.

Unfortunately, this also means that the analytical level of this analysis is different than the analytical levels in previous chapters: While the analyses of economic and social context included contextual information on PD level (which is the second-lowest administrative level in Austria except for the municipality), this is not the case regarding the media context. In this final analysis, the spatial level of federal states must be investigated, even though this level is comparatively high and corresponds to NUTS 2 level in the *Nomenclature des unités territoriales statistiques* applied by the European Union. However, since no lower-level contextual information is available this change of analytical levels is necessary for investigating media contextual effects and taking spatially varying popularity of media outlets into account.

Using this information on state-level market shares of Austrian newspapers, the newspaper media context can be operationalised for every respondent: First, the mean tonality bias of every newspaper towards every party included in this analysis must be calculated. This can be achieved by using the information on media content that helps us to determine the media outlets' tonality bias.

Then, using the spatial information on regional newspaper market shares, the contextual tonality bias of newspapers (or media context) can be created by multiplying the regional market shares of every newspaper with its tonality bias towards every investigated party. The larger the market share of newspaper ABC in region X is, the higher weighted the tonality bias of ABC in region X is, the larger the market share of newspaper DEF in region Y, the stronger is the contextual tonality bias of DEF in region Y...etc. This also means that contextual tonality bias varies by context; the larger the market share of newspaper ABC in region X is, the stronger is its contextual tonality bias. However, in case ABC's market share is much smaller in region Y, its contextual tonality bias is also weaker and so is its influence on individual voters (since we assume that its contextual impact is also weaker).

Finally, this data on regional tonality bias is combined with individual-level data and every respondent living in region X is assigned the contextual tonality bias measures in region X (for every newspaper and towards every party). Conclusively, respondents living in Y get the corresponding measures for region Y, those living in Z the

measures of region Z...etc. By doing so, media contextual data had been created and can be used for analysis of contextual effects.⁶⁰

7.2.3. Media Content and Tonality Bias

Now let us turn to media content data and the information that is provided by the AUTNES Manual Content Analysis of the 2013 Austrian National Election Coverage (Eberl et al., 2016; Kleinen von Königslöw et al., 2016): The information we need in order to investigate media effects in general and contextual media effects in particular is not limited to information on *what* the media actually reports but includes also *how* the media reports about *whom*: E.g. different newspapers do neither always report about the same events nor do they report in the same way in case they do cover the same stories. In fact, different newspapers (or media outlets in general) might differ substantively in its reporting and selection of stories and, thus, are *biased* regarding this selection in one way or the other. Additionally, it not only depends on *what* newspapers report but also on *how* they report. This leads to another possibility of biased information that a reader might receive; that is the tonality bias described above (see section 7.1).

In the AUTNES Manual Content Analysis of the 2013 Austrian National Election Coverage, all media coverage on the 2013 Austrian national election campaign of the eight major daily newspapers is included. This data not only includes information on the object of a newspaper article (who is the topic of the newspaper article; which political party or political actor?), but also from which newspaper the article in question is (who reports about that object?) and on how the article's object is addressed (how is the article's object evaluated; good, bad, or neutral?). The political parties included in this analysis of media context and media tonality bias are the major parties running for election in the 2013 Austrian campaign: SPÖ, ÖVP, FPÖ, the Greens, and Team Stronach. Other parties such as BZÖ and NEOS are not included because there are either too few evaluations on individual level (which would lead to an increase in missing values on respondent level and to a lower number of cases in the following) or too few media reporting on that party (leading to unreliable measures of tonality bias towards that party) or both.

⁶⁰ However, the same will be done regarding individual exposure to tonality bias by multiplying every newspaper tonality bias measure with the extent of individual consumption of every newspaper.

The operationalisation of tonality bias used for this study follows the operationalisation applied by Eberl et al. (2015).⁶¹ This operationalisation of tonality bias in news media is based on evaluative claims towards parties that had been coded within articles; namely the claim of whether the article's object is evaluated as positive (+1), negative (-1) or neutral (0). Tonality bias is then separately computed for every party within the different media outlets by using each party's deviation from the average party tonality in that media outlet. By doing so, newspaper specific effects (e.g. one newspaper reports especially negative about *all* parties) can be ruled out.

So, there is a party specific tonality bias (one for every party and, thus, five in total) for every media outlet (five party specific tonality bias variables for each of the eight media outlets). This information on media tonality bias is assigned to the respondents corresponding to their reported media consumption behaviour with respondents that reported not reading any newspaper at all assigning a value of 0 (and, thus, a neutral average tonality bias). The result of this procedure is the respondents' individual tonality bias exposure that is used for investigation of H1 and as control variable in the investigation of the other hypotheses.

Table 29 gives an overview on newspapers' reporting and mean tonality bias towards every party during the electoral campaign 2013. Here we see that on average almost every party was addressed negatively (except for the Greens) and that evaluations of the parties running for election roughly correspond to the ideological leaning of Austrian newspapers (with e.g. the liberal newspaper *Der Standard* slightly favouring the left-wing parties SPÖ and the Greens compared with the conservative newspaper *Die Presse* that favours *OeVP* or the popular *Kronen Zeitung* favouring the right-wing populist Team Stronach...etc.).

⁶¹ See also Lengauer and Johann (2013)

Newspaper	SPOe	OeVP	FPOe	Greens	TeamS
Der Standard	-0.0093842	-0.0775658	-0.0216211	0.0535885	0.0549826
Die Presse	-0.0106405	0.0056057	-0.0018075	0.0395761	-0.0327338
Salzburger Nachrichten	-0.0405906	-0.036232	0.0227784	0.0672939	-0.0132497
Kronen Zeitung	0.0202478	-0.0434016	-0.0161082	-0.021038	0.0603
Oesterreich	0.0364238	-0.0308442	0.0072705	0.0233308	-0.0361809
Heute	0.0030776	0.0582563	-0.0200357	0.0059751	-0.0472733
Kurier	-0.014762	-0.0199286	0.0141078	0.0474359	-0.0268531
Kleine Zeitung	-0.0210949	-0.0222272	-0.0504848	0.0875926	0.0062143
Total	-0.0045904	-0.0207922	-0.0082376	0.0379694	-0.0043492

Table 29: Newspaper Mean Tonality Bias

This new set of tonality bias variables is then also used for operationalisation of media context (see above). Media outlets that are not included in the AUTNES Manual Content Analysis of the 2013 Austrian National Election Coverage (such as most regional newspapers in Austria, e.g. Tiroler Tageszeitung, Oberösterreichische Nachrichten,...etc. with mostly low market shares on national level, see also Aichholzer et al., 2014; Verein Arbeitsgemeinschaft Media - Analysen, 2013) are also assumed to have a neutral overall tonality bias with a value of 0.⁶²

7.2.4. Individual-Level Data

In order to investigate media contextual effects I will use individual-level data provided by the AUTNES Online Panel Study (Kritzing et al., 2016a, 2016b). This data had been merged with the AUTNES Manual Content Analysis of the 2013 Austrian National Election Coverage (Eberl et al., 2016; Kleinen von Königslöw et al., 2016). Before that, the AUTNES Manual Content Analysis of the 2013 Austrian National Election Coverage had been merged with the information on regional newspaper market shares (Verein Arbeitsgemeinschaft Media - Analysen, 2013) in order to create information on the state-level media context and the tonality bias that is present at the nine contexts (that are federal states).

Since we know in which states respondents are located, how many and which newspapers these respondents read and how the state level media contexts are constituted, contextual analysis of media effects can be conducted by linking

⁶² However, in another investigation that also includes these regional newspapers and assigns them tonality bias values that correspond to their ideological leaning (based on media experts' evaluations of regional newspapers), the results do not significantly differ from the results of this investigation reported below.

respondents to the media context that had been present at their place at the time of the interview while controlling for individual media consumption.

The outcome variable of this investigation is the propensity to vote (PTV, see van der Eijk, Franklin, & Oppenhuis, 1996; van der Eijk et al., 2006; and below, respectively) from wave 3 of the AUTNES Online Panel Study (Kritzing et al., 2016a, 2016b). This third wave of the AUTNES Online Panel Study is used since information on PTVs is not included in wave 4 of this panel while in latter waves (wave 5 in 2014 and wave 6 in 2015) there is no corresponding information on media content that can be linked with individual party preferences. Using earlier waves of this panel (e.g. wave 2) would also be not a good choice since too much media information would get lost or remain unused for operationalisation and, thus, could lead to unreliable media tonality bias measures.

PTV, however, is used since information on media reporting about campaigns and political events before the election took place is used in this analysis of media contextual effects. Thus, in contrast to earlier chapters (in which rather long-term preferences towards different parties are investigated because it is assumed that the contextual influence in these chapters also operates on the long-term level) the contextual variables only include information that is directly linked with the 2013 election and, consequently, their impact on actual voting intentions should be investigated.

By using PTV scores, respondents can report for every party in a multiparty system the propensity to ever vote for that party on national level applying a scale from 0 ('very unlikely') to 10 ('very likely'). The usual question wording (that had also been applied throughout the AUTNES surveys) reads as follows:

*There are several parties in Austria, each of which would like to receive your vote. Using the scale of 0 to 10, how likely is it that you would **ever** vote for each of the following parties? (Kritzing et al., 2016c: 7; 49)*

This procedure is sometimes regarded as being more preferable than nominal vote choice variables, especially in fragmented multiparty systems: Small parties are defined by their small number of voters (because otherwise, obviously, they were big parties). This, of course, reflects also in survey research when only few people report that they had voted for (or intend to vote for) these small parties. Conclusively, small parties cannot be properly captured by nominal vote choice variables since there

often are too few cases for proper analysis (van der Eijk et al., 1996; van der Eijk et al., 2006).

For taking care of the reported PTV at the beginning of this panel study, PTVs from wave 1 are included as control variables and, thus, rather the change of PTVs from wave 1 to wave 3 is investigated than the total values of PTVs at the time of wave 3 (since it is controlled for the impact of PTVs at the beginning of this panel study because it is also assumed that PTVs from the first wave of this panel are highly correlated with PTVs from latter waves).

Since the AUTNES Online Panel Study also includes information about the amount of political discussion with others, I will also be able to take the effect of discussion with others and composition of respondents' discussion networks into account by comparing different subgroups with each other. Even though political discussion with others was part of the last wave of the AUTNES Online Panel Study that had been carried out in 2015, this data will be used as proxy measure for political discussion during the 2013 Austrian campaign.⁶³ By doing so, broad investigation of media contextual influence is still ensured.

The first measure of political discussion with others used in this analysis is the reported total frequency of political discussion. Respondents could name up to three different persons with whom they discuss politics and political events:

Below, I will ask you a few questions about the three persons, who you most frequently talk to about politics.

*Please think about the first person, who you talk to about politics. Is this person...?
(Kritzing et al., 2016c: 195; 198, 201)*

For every person that the respondents named as political discussion partner, they had been asked how often they talk about politics with each other using an ordinal scale ranging from 'often', to 'sometimes', over 'rarely' and finally 'never':

How often do you talk to this person about politics? (Kritzing et al., 2016c: 195; 198, 201)

⁶³ However, it is assumed that the amount of political discussions with others is rather stable and not much higher during the time of a political campaign than it is in between elections.

Frequency tables of the amount of political discussion are presented in Table 30 below.⁶⁴

	1st Person		2nd Person		3rd Person	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
often	321	45.02	132	19.94	67	13.4
sometimes	348	48.81	393	59.37	264	52.8
rarely	42	5.89	136	20.54	167	33.4
never	2	0.28	1	0.15	2	0.4
Total	713	100	662	100	500	100

Table 30: Frequency of Political Discussions

Data on the frequency of political discussion with every discussion partner had then been combined with each other to get a rescaled joint measure of political discussion for every respondent. This had been done by adding up the ordinal values of frequency of political discussion for every reported discussion partner. Since ‘never’ was the lowest frequency of political discussion (and recorded as 1) and often was the highest frequency of political discussion (and recorded as 4), the joint measure theoretically ranges from 3 (a respondent who never talks about politics with three others; but also, a respondent who talks sometimes about politics with only one other person) to 12 (a respondent who talks often about politics with three other people). Conclusively, respondents who do not report talking with any other person about politics at all had been assigned an amount of political discussion of 0.

However, we see that this was the case for only about one fifth of the respondents (see Table 31). More than half of the respondents reported talking about politics with three other people and around 18 per cent named two discussion partners. Thus, we can assume that information on the frequency of political discussion with others is a quite reliable measure.

	Frequency	Percent
No discussion	192	21.22
1 Person	51	5.64
2 Persons	162	17.9
3 Persons	500	55.25
Total	905	100

Table 31: Number of Discussants about Political Events

⁶⁴ Please note that the total numbers are decreasing with an increasing number of discussion partners since not all respondents named up to three discussion partners but, instead, reported talking about politics to only one or two person(s).

This joint measure of political discussion had then been divided into its quartiles to get a categorical measure that defines the four groups of frequency of political discussion and acts as proxy measure for exposure to the media context. This was necessary since the joint measure includes too many categories for analysis and, thus, requires a considerable reduction of groups. These four groups with varying amounts of political discussion will then be compared with each other regarding the varying influence of media context. As already mentioned above, this will be done by keeping all model specifications constant but conducting separate analyses for the four quartiles of frequency of political discussion. By doing so, it can be investigated whether the impact of media context changes (in this case: gets stronger the more voters talk with others about politics).

It is also assumed that the more homogenous political discussion networks are the stronger is the impact of the media context. Homogeneity of political discussion networks is quite narrow operationalised as voting for the same political party in the 2013 Austrian national election and, thus, not taking the same ideological leaning of parties into account. The question wording regarding the vote choice of discussion partners reads as follows:

What do you think, which party did this person vote for in the last national elections in September 2013? (Kritzing et al., 2016c: 197; 200; 203)

If a respondent reports that she assumes her first political discussion partner to have voted for the same party as she did, the homogeneity measure increases by 1. If she reports that the second discussion partner also voted for the same party as she did, the homogeneity value increases again by 1...etc. Conclusively, homogeneity can range from 0 (no discussion partner is assumed to have voted for the same party as the respondent did) to 3 (the respondent reports discussing politics with three other people who are assumed to have voted for the same party as she did).⁶⁵

⁶⁵ However, not voting or casting an invalid ballot as well as voting for the Pirate Party was excluded from this analysis while other parties had been included in this measure of political discussion homogeneity.

	Frequency	Percent
0	425	55.63
1	188	24.61
2	119	15.58
3	32	4.19
Total	764	100

Table 32: Homogeneity of Political Discussion Networks

Descriptive statistics on the homogeneity of political discussion networks are reported in Table 32. We see that political discussion networks are not as homogenous as one would assume; more than half of the respondents think that none of their discussion partners voted for the same party as they did, even though about the same share reports to discuss politics with at least three other people (see Table 31). However, about 4 per cent think that their political discussion network is absolutely in line with their own vote choice.

7.3. Data Analyses and Results

These hypotheses will be investigated using the AUTNES Online Panel Study (Kritzing et al., 2016a, 2016b) that had also been used in this study's other analyses. Compared to chapter 4 and chapter 5 and the analyses of economic and social context, respectively, the analysis of media contextual is somewhat different: Since we not only have *spatial contextual variables* (such as e.g. regional newspaper market shares) but rather spatial contextual variables for (almost) every party (newspaper mean tonality bias towards every party that had been weighted by their regional market shares), analysis of party preferences can be conducted by using so-called stacked data and stacked data analysis. This has the advantage that we not only can investigate the impact of some rather 'general' variables (e.g. a voter's issue position) on vote choice and party preference but also the impact of more specific variables such as party positions (e.g. the parties' issue position) on this choice (Oppenhuis, 1995). Similar can be said regarding the contextual measures on mean tonality bias since we have this information for (almost) every party running for election in 2013 instead of a rather 'general' measure.

Additionally, another requirement for stacked data analysis is that the dependent variable is also party specific, which is the case when using the PTV for every party as outcome variable of statistical analysis (van der Eijk et al., 1996; van der Eijk et al.,

2006). However, it is also required to change the format of the dataset for conducting this statistical analysis as well as individual level control variables need to be adapted.

ID	State	PTV1	PTV2	PTV3	Level 1 Var1	Level 1 Var2	Level 2 Var. Party 1	Level2 Var. Party 2	Level 2 Var. Party 3
1	VIE	7	3	4	a	c	x	z	y
2	SBG	2	9	2	a	c	x	y	y
3	NOE	4	4	9	b	a	y	y	z
4	OOE	1	6	4	b	b	x	y	x
5	KTN	4	8	8	a	a	z	x	z

Figure 13: Sketch of Wide Format Data Matrix with Three Parties and One Contextual Variable

In this form of statistical analysis, the data format must be changed from the typical wide data format (Figure 13) into a long format data matrix (Figure 14) first. Since party evaluations using PTVs are nested within respondents (every respondent can report a PTV score for every party), the *Observations X Variables* data structure changes into a data matrix in the format *Observations*Parties X Variables*. By doing so, each respondent's party specific variables (such as the PTV but also individual or contextual tonality bias of newspapers) are kept as unique values while non-party specific variables (mostly socio-demographic variables or other control variables) are duplicated.

ID	State	PTV	PTV id	y-hat L1 Var1	y-hat L1 Var2	L2 Var.
1	VIE	7	1	y-hat a	y-hat c	x
1	VIE	3	2	y-hat a	y-hat c	z
1	VIE	4	3	y-hat a	y-hat c	y
2	SBG	2	1	y-hat a	y-hat c	x
2	SBG	9	2	y-hat a	y-hat c	y
2	SBG	2	3	y-hat a	y-hat c	y
...
5	KTN	4	1	y-hat a	y-hat a	z
5	KTN	8	2	y-hat a	y-hat a	x
5	KTN	8	3	y-hat a	y-hat a	z

Figure 14: Sketch of Long Format Data Matrix after Reshaping ('Stacking')

To properly investigate PTVs while keeping care of the duplicated values, reshaping the data format is not the only thing that has to be done before starting the actual

data analysis. According to van der Eijk et al. (2006), in the analysis of PTV scores, so-called ‘*y-hats*’ of non-party specific predictor and/or control variables should be used instead of ‘regular’ predictor variables that are already included in the dataset. The transformation of non-party specific variables into corresponding *y-hat* variables had been done using the Stata ado-file PTVTOOLS (De Sio & Franklin, 2011).

These *y-hats* must be computed for every variable that shall be included in statistical analysis but is not party specific. Regarding the analysis of media context, this applies to the usual control variables of age, gender, union membership, education, and occupation that had also been used in the analysis on economic and social context (analogous to “Level 1 Var1” and “Level 1 Var2” in Figure 13 and Figure 14, respectively). Individual tonality bias as well as contextual tonality bias and the dependent variable PTV in wave 3 (with its control variable PTV in wave 1) remain unchanged since they are party specific and, thus, can be included in analysis without this transformation (analogous to “PTV1” to “PTV2” and “Level 1 Var Party 1” to “Level 1 Var Party 3” in Figure 13 and Figure 14, respectively).

Even though the data used for analysis changed as well as the dependent variable did, analytical procedures basically remain the same: The hypotheses stated above will be investigated using a hierarchical data research design with a three-level data structure and maximum likelihood estimation that had been carried out using Stata 13. The data structure, however, is slightly different since there are PTVs nested within respondents that are nested within states. While in earlier analytical chapters the data structure also reflects the spatial/administrative structure of Austria (with respondents located within PDs that are nested within RCs), this is not the case regarding the analysis of the media context.

Though, this change of data structure was necessary since stacked data analysis demands taking care of the fact that PTVs are nested within respondents and a spatial two-level structure cannot be applied in this case: Federal states (*‘Bundesländer’*) can neither be aggregated up to a meaningful higher spatial level nor is there lower-level data of regional media market shares (e.g. on PD level) available. However, regional media market shares are essential in the operationalisation of the contextual tonality bias: Without this information, it is not possible to investigate spatial varying contextual tonality bias exposure. To investigate spatial variation on at least one level, the federal states of Austria are used as spatial level since this is the only data available.

Additionally, party fixed effects are included in the statistical models for taking care of structural bias in media reporting. Structural bias in media reporting might exist in case a party is addressed as especially positive (or negative) in a media outlet's reporting because of institutional or historical reasons (e.g. incumbency status) and receives also higher (or lower) PTV scores for the same reasons(s). In this case, not the effect of tonality bias towards this party would be investigated but rather the effect of structural bias that is based on non-social phenomena. By including party fixed effects in the statistical models, the effect reflects the impact tonality bias on PTV.

7.3.1. Tonality Bias: Individual and Contextual Impact

In this chapter's first analysis I will investigate the impact of tonality bias on PTV using both analytical levels (that is individual and contextual tonality exposure) and the corresponding measures, respectively. Moderating effects of political discussion, however, are not yet included in the analysis. Nevertheless, this investigation is the starting point for additional analysis in which the moderating role of political discussion will be included. Results of this first analysis are reported in Table 33.

	Model1	Model2	Model3
PTV (w1)	0.751*** (0.0101)	0.753*** (0.0101)	0.751*** (0.0101)
Age	0.426*** (0.111)	0.427*** (0.111)	0.427*** (0.111)
Gender	0.246 (0.159)	0.251 (0.159)	0.248 (0.159)
Union Membership	0.203 (0.141)	0.211 (0.141)	0.203 (0.141)
Education	0.285*** (0.0643)	0.292*** (0.0642)	0.284*** (0.0643)
Occupation	0.108 (0.226)	0.133 (0.225)	0.108 (0.226)
Tonality Bias	3.872** (1.442)		3.405* (1.547)
Party 1 (SPOe)	0.955*** (0.106)	0.941*** (0.105)	0.960*** (0.106)
Party 2 (OeVP)	0.859*** (0.112)	0.896*** (0.135)	0.922*** (0.135)
Party 3 (FPOe)	1.068*** (0.108)	1.107*** (0.123)	1.118*** (0.123)
Party 4 (The Greens)	0.855*** (0.105)	0.843*** (0.107)	0.837*** (0.107)
Contextual Tonality Bias		0.0541+ (0.0309)	0.0277 (0.0331)
Constant	0.0940 (0.0838)	0.0784 (0.0873)	0.0734 (0.0873)
Var(State)	1.05e-14 (1.45e-13)	2.30e-14 (3.67e-13)	2.10e-14 (3.43e-13)
Var(State Respondent)	.7295534 (0.084763)	.7307567 (0.084866)	.7300552 (0.0847549)
Var(residual)	5.105645 (0.1174273)	5.109727 (0.1175079)	5.104509 (0.117363)
N	4765	4765	4765

Standard errors in parentheses
+p<0.1 * p<0.05 ** p<0.01 *** p<0.001

**Table 33: Influence of Tonality Bias
(Individual and Direct Level 2 Effect) – Model 1-3**

In the first model (Model 1) only the individual tonality bias is included while in the second model (Model 2) this is true for contextual tonality bias. In the final model (Model 3), however, both measures on tonality bias are included. This had been done to separately investigate the influence of both measures first and then have a closer look on the results when the full model is presented.

Starting with the control variables, we see that (except for PTVs in the first wave) age and education do have the strongest influence on party preferences. The strong effect of PTV from wave 1 can be explained by considering that these variables do capture the same thing and are included to control for the initial party preferences at the

beginning of the campaign. However, it is obvious that evaluations of parties are quite strongly correlated over time. Age and education, however, are known for their strong effect on party preferences in Austria, as we have already seen in previous chapters (see also Johann et al., 2014; Kritzinger et al., 2013).

Starting with the effect of individual tonality bias (that is based on the individual media consumption), we see in the first model that respondents are influenced in their PTV by this bias. Thus, the effects reported by Eberl et al. (2015) could be reproduced and we can conclude that individual media bias exposure (still) matters for PTV. But what about the contextual effect of tonality bias?

Here we see that in the second model (in which individual tonality bias is excluded), the contextual tonality bias has a small but significant and positive effect on PTVs; the more positive contextual tonality bias is the stronger are party preferences. However, we must keep in mind that in this model it is not yet controlled for individual tonality bias.

Finally, in the full model that includes both individual and contextual tonality bias we see that the impact of contextual tonality bias is closer to zero and not significant anymore while the effect of individual tonality bias also got slightly weaker compared to Model 1 (but is still statistically significant). But how does this picture change once the influence of political discussion and its moderating role is introduced?

7.3.2. The Moderating Role of Political Discussion

Table 34 (next page) shows the effect of individual and contextual tonality bias across different groups of political discussion with others. Political discussion had been summarised across all reported discussion partners to get a joint measure of political discussion regardless of the size of the discussion network. This joint measure had then been divided into its quartiles to get groups of (roughly) the same size to compare the different groups with each other and to estimate the effect of frequency of political discussion on the impact of contextual tonality bias. Respondents who do not discuss politics with others had been assigned a political discussion value of 0.

	PolDis (Q1)	PolDis (Q2)	PolDis (Q3)	PolDis (Q4)
PTV (w1)	0.744*** (0.0275)	0.703*** (0.0250)	0.702*** (0.0379)	0.806*** (0.0254)
Age	0.739* (0.317)	0.0884 (0.294)	0.0679 (0.428)	0.451 (0.289)
Gender	-0.207 (0.429)	0.219 (0.387)	0.0467 (0.576)	0.0642 (0.405)
Union Membership	-0.0849 (0.371)	-0.206 (0.346)	0.568 (0.488)	0.505 (0.332)
Education	0.0439 (0.208)	0.443** (0.156)	0.451+ (0.243)	0.201 (0.150)
Occupation	0.350 (0.795)	-0.284 (0.582)	0.760 (0.913)	0.102 (0.577)
Tonality Bias	6.256 (4.117)	5.359 (3.724)	2.458 (5.592)	8.421* (4.117)
Contextual Tonality Bias	-0.0216 (0.0911)	-0.0357 (0.0804)	0.0666 (0.124)	-0.102 (0.0810)
Party 1 (SPOe)	1.136*** (0.286)	0.926*** (0.261)	0.765* (0.381)	0.503+ (0.259)
Party 2 (OeVP)	0.680+ (0.378)	1.208*** (0.336)	0.596 (0.480)	0.421 (0.317)
Party 3 (FPOe)	0.918** (0.341)	0.783* (0.306)	0.776+ (0.433)	0.669* (0.295)
Party 4 (The Greens)	0.816** (0.293)	0.855** (0.263)	0.851* (0.394)	0.557* (0.282)
Constant	0.0440 (0.250)	0.341 (0.231)	0.500 (0.308)	0.357 (0.218)
Var(State)	7.46e-19 (.)	.0504852 (.0744643)	6.58e-13 (8.43e-12)	4.14e-14 (7.32e-13)
Var(State Respondent)	.9093244 (.2474144)	.5668098 (.1975844)	.7442295 (.3132939)	1.279312 (.2884042)
Var(residual)	4.656538 (.3019168)	5.534491 (.2994968)	5.776833 (.452254)	4.251567 (.321964)
N	598	861	412	681

Standard errors in parentheses

+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

**Table 34: Tonality Bias and Frequency of Political Discussion
(Individual and Direct Level 2 Effect)**

Here we see that contextual tonality bias does not have a statistically significant effect on PTV, regardless of the amount of political discussion. Even though we can also observe that the sign of coefficients changes between the different subgroups, the coefficients are always close to zero and insignificant. Thus, the change of direction might be rather based on chance than on actual social processes.

However, we see that individual tonality bias exposure is now only significant for respondents with a high level of political discussion: The significant effect of

individual tonality bias on PTV presented in Table 33 vanished for all other groups. We also see in Table 34 that the influence of age on PTV is only significant for those with the lowest level of political discussion while education seems to be relevant only for respondents with moderate levels of political discussion.

The effects of homogeneity of discussion networks on contextual impact are presented in Table 35 (next page). Here we see that introducing homogeneity of discussion networks leads to some spurious results: First, the impact of individual-level tonality bias on PTV is not as clear as it used to be; instead, the coefficients are sometimes statistically significant and sometimes they are not. Moreover, we also cannot detect a clear picture since the significant results can be observed for those with a very inhomogeneous discussion network and those whose discussion network is rather homogeneous (with two discussion partners voting for the same party; see Homog.0 and Homog. 2 in Table 35). However, the coefficient for the latter is much larger than for those with a rather inhomogeneous discussion network. Thus, one could assume that in case one's discussion partners about politics do (allegedly) hold very similar political views, the tonality bias effects becomes stronger since voters tend to reinforce their views (and the tonality bias they received through the media). The absence of a significant effect for those with the highest level of homogeneity could be explained by this group's small sample size. Those with a very inhomogeneous political discussion network and no fellow partisan to talk to, however, must rely on the mass media and its (biased) information more strongly.

	Homog. 0	Homog. 1	Homog. 2	Homog. 3
PTV (w1)	0.715*** (0.0208)	0.790*** (0.0289)	0.703*** (0.0399)	0.828*** (0.0473)
Age	0.268 (0.239)	0.225 (0.309)	1.009+ (0.519)	-0.450 (0.662)
Gender	-0.122 (0.317)	0.0873 (0.447)	1.026 (0.677)	-1.530+ (0.834)
Union Membership	-0.0258 (0.283)	0.971* (0.405)	0.424 (0.540)	-1.297* (0.590)
Education	0.127 (0.134)	0.234 (0.166)	0.575* (0.261)	0.949* (0.387)
Occupation	0.134 (0.483)	0.189 (0.646)	-0.639 (1.200)	2.506+ (1.428)
Tonality Bias	5.494+ (3.037)	5.103 (4.643)	11.45+ (6.829)	5.721 (8.069)
Contextual Tonality Bias	-0.0431 (0.0678)	-0.0725 (0.0952)	-0.0153 (0.140)	-0.148 (0.158)
Party 1 (SPOe)	0.840*** (0.210)	1.078*** (0.304)	0.874+ (0.450)	0.175 (0.518)
Party 2 (OeVP)	0.659* (0.270)	1.119** (0.378)	1.162* (0.570)	-0.706 (0.681)
Party 3 (FPOe)	0.581* (0.248)	0.669* (0.337)	1.547** (0.529)	1.714** (0.600)
Party 4 (The Greens)	0.659** (0.215)	1.123*** (0.316)	0.948* (0.455)	-0.247 (0.537)
Constant	0.477* (0.204)	0.0243 (0.232)	0.117 (0.353)	0.714 (0.477)
Var(State)	.0518789 (0.0678062)	2.33e-18 (3.73e-17)	7.04e-14 (.)	1.52e-13 (4.26e-10)
Var(State Respondent)	1.021108 (0.1982448)	.3713686 (0.2114001)	.5705524 (0.3513053)	1.521337 (0.6256803)
Var(residual)	5.068344 (0.2343378)	4.411496 (0.3089121)	6.736791 (0.5670907)	2.661408 (0.4014116)
N	1175	535	358	110

Standard errors in parentheses
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

**Table 35: Tonality Bias and Homogeneity of Political Discussion
(Individual and Direct Level 2 Effect)**

However, contextual tonality bias is still insignificant for every subgroup included in the model. Even though the coefficients are not significant, their sign shows in the wrong direction with a negative impact of a positive tonality bias. One possible explanation for these results could lie in the comparatively low number of observations of the variable on discussion network homogeneity (n=764); as we have already seen in Table 32 (since we must keep in mind that the dataset had been reshaped and now has the format of *Observations*Parties X Variables*). Nevertheless, combining subgroups with each other (not presented here) leads to similar findings so it must be assumed that the measure of discussion network homogeneity is not the best choice for analysis of media contextual effects and that

the case numbers became too small to get meaningful results of this statistical analysis.

Discussing the model fit statistics and random part of the model, however, does not seem to be necessary for this analysis. Regarding the analyses of economic and social context it was crucial to evaluate whether the hierarchical structure of the model did better than single-level linear regression models would do. Additionally, the question whether the level of PD or RC is more important had to be answered in both chapters. In this analysis, both questions are less interesting: Since the analysis was conducted using a stacked dataset, the hierarchical model will of course do better than a single-level regression model (because it is taken care of the variance structure on level 2, which is respondent level). Since level 2 is respondent level and level 3 the rather high administrative level of Austrian states, it is also obvious that observations within the same level 2 (respondents) are stronger correlated with each other than observations within the same level 3 (states).

7.4. Summary and Discussion

After analysing the effects of tonality bias on individual and contextual level as well as the role of political discussion, the hypotheses of this chapters' analysis can be discussed. As we have seen, results reported by Eberl et al. (2015) could be largely reproduced. However, looking deeper into individual tonality bias exposure and political discussion, we could see that this effect can be observed only for respondents with a high a level of political discussion. The question why theses respondents are especially responsive for tonality bias should be answered in additional studies and by other researchers, since individual tonality bias is not the focus of this study.

The focus of this study and this thesis, however, lies on contextual media effects or the impact of contextual tonality bias that operates regardless of individual media consumption and that every respondent living in the same state experiences. Here we have seen that the media context does not seem to have any effect on party evaluations (applying the concept of PTV) at all: Regardless of whether all respondents included or whether only subgroups are investigated, contextual tonality bias remains insignificant and, thus, without any impact on PTV.

However, in this chapter's first analysis presented in Table 33 we saw that contextual tonality bias is only relevant if individual tonality bias is not included. This small

effect, however, vanishes once individual tonality bias is included in the analysis. But we have also seen that the effect of individual tonality bias gets weaker once contextual tonality bias is included in the analyses. This might indicate that there is only a small contextual effect that results from the media context.

The findings of these analyses can be summarised as follows: The first hypothesis H1 cannot be rejected and we must assume that individual tonality bias exposure influences PTV: We can clearly see that individual tonality bias has a positive significant effect on party preferences regardless of whether contextual tonality bias is included or not. This finding is in line with other research on media bias and its effects.

However, there is no evidence of a contextual tonality bias effect once individual tonality bias is introduced in the model. Even though there is a small effect of contextual tonality bias in Model 2 in which individual tonality exposure is excluded (see Table 33), we can hardly assume that contextual tonality bias is relevant regarding PTV. Furthermore, this non-effect of the media context remains even after splitting the sample into different groups of political discussion; so H2, H3, and H4 should be rejected since we cannot assume that contextual tonality bias influences PTV.

Though, these non-findings regarding the impact of political discussion (its frequency and homogeneity of discussion networks, respectively) should not be overestimated. Because of the data's panel structure, case numbers of political discussion variables (carried out in 2015) are rather small and get even smaller if these variables are included in statistical models (while looking at Table 34 and Table 35, we should keep in mind that case numbers still reflect the stacked format of data and do not represent actual observation but observations * parties). However, we must assume by now that tonality bias seems to solely operate on individual and not on a contextual (spatial) level. But why is that so or what could be the reason that we did not see any contextual effect in this analysis of bias in Austrian newspapers?

First, the change of analytical level compared to other analyses of this thesis could hide contextual media effects. The federal state level is a rather high administrative level in Austria (for comparison with other countries; the nine federal states correspond to NUTS 2 level in Austria) and this analysis had maybe been too rough to detect contextual impact. Thus, using the lower analytical level of PD (or even RC)

could maybe help to get a deeper insight into media contextual effects, even though this could turn out to be problematic regarding data availability of regional (local) market shares of media outlets.

Second, exclusion of television news broadcast from this study maybe also hides contextual media effects since the second most-important source of political news was not included in analysis. While this seems to be a meaningful consideration regarding the completeness of the media context (of course, media context does not consist solely of print newspapers), including television could have been problematic from an analytical point of view since there are only few television cases in the AUTNES Manual Content Analysis of the 2013 Austrian National Election Coverage (Eberl et al., 2016; Kleinen von KönigsLöw et al., 2016) that might skew the bigger picture of tonality bias in Austrian news media.

However, even if television news broadcast was incorporated in the measurement of tonality bias, the issue of missing regional television market shares (that is contextual/spatial information that is needed for contextual analysis) would remain. The same issue also applies to other news outlets such as internet news media or radio broadcast; due to unsatisfactory data availability on mass media content and its spatial distribution, one can only analyse an extract of media context in Austria instead of the big and complete picture of media context: The analyses are as close to reality as they could be, however, statistical models always reduce the bigger picture to its essentials.

Whether another operationalisation of media context regarding spatial units (see above) or regarding what actually constitutes the ‘information environment’ that a voter experiences (such as in Hopmann et al., 2010 with an approach that only takes media content of the last few days before the interview into account) would be better suited are also questions that could be answered by future research. By now, one can only speculate and must conclude that there is hardly any evidence for media contextual influence on PTV and individual party evaluations in Austria.

8. Summary and Conclusions

In this study, several types of spatial context and their impact on individual party preferences were investigated. The analyses focused on only one country since a broad investigation of contextual impact and the impact of different types of context were the aims of this thesis. Thus, instead of conducting a comparative investigation of different countries, the case of Austria and preferences towards Austrian parties were investigated in depth.

The case of Austria was chosen because of its intermediate extent of contextual impact on political behaviour that had been expected before the start of this investigation: Since Austria is neither a case with a very high extent of contextual influence (such as the highly federalist countries of Belgium and Germany) nor a country with a very low level of contextual impact, it seemed to be a good choice for these analyses. Another reason why to choose this case is the availability of high quality data, which is provided by the Austrian National Election Study AUTNES.

Thus, this study not only investigates contextual impact in general, but makes use of the concept of Books and Prysby (1991) who distinguish four different kinds of context. Three of these theoretically relevant contexts and their impact had been investigated in this thesis; the economic context, the social context, and the media context.⁶⁶ Context, however, is spatially defined as *place* – *place* is context and context is *place*. Thus, voters (or people in general) that live in the same geographical (that is spatial) unit do live in the same (economic, social, and media) context as well. Regarding the case of Austria, however, the geographical units of my choice were regional constituencies and political districts.⁶⁷

In this thesis, it is hypothesised that people are influenced by their context because of the information flow at the places where they are living: They regularly see, hear, or experience contextual stimuli in their everyday lives and, because of this daily exposure to their unique spatial context, are influenced by their context in their political behaviour.

⁶⁶ The fourth kind of context, the political or party context, was not part of this study due to a lack of appropriate data.

⁶⁷ Regional constituencies, however, consist of several political districts in most cases – as do NUTS 3 areas in Austria (even though Austrian NUTS 3 areas are not the same as regional constituencies). Political districts are the second lowest administrative level but no electoral tier in Austrian national elections (see section 4.1 for a discussion of analytical levels in this thesis).

Contextual stimuli, of course, vary by the type of context in question: Economic contextual stimuli are different than social contextual stimuli, and both are very different than stimuli of the media context. Regarding this thesis, the contextual stimuli of these different kinds of context are different as well. To be specific; economic contextual stimuli include several facts and figures of regional economic performance while social contextual stimuli include characteristics of the regional population regarding their social and sociodemographic characteristics. Media contextual stimuli, however, are constituted by the media's reporting and its popularity (that is market shares) in different regions. Data on these higher-level contextual stimuli was then merged with individual-level data for investigating the impact of the economic, social, and media context on individual party preferences. By doing so, contextual impact had been studied while also controlling for respondents' individual-level characteristics.

The aim of this study was the investigation of contextual impact on individual-level party preferences. Additionally, it was also investigated what regional level is more important regarding its impact on the individual-level dependent variable, and whether the number of years a person has already lived in her political district moderates contextual influence. Regarding the impact of the media context, the role of political discussion networks as modes of transmission of contextual impact was also investigated. So, the analyses not only focuses on three different types of context, which is a novelty in the investigation of contextual effects in multiparty systems, but also on moderating individual-level variables and the proper level of analysis.

The aggregate-level variables on economic and social context referred to the spatial level of political districts (PD), the second lowest administrative level in Austria that is even lower than NUTS 3 level in the *Nomenclature des unités territoriales statistiques*. Data sources were in most cases official statistics provided by public institutions such as the national statistics office, the national labour bureau, the Roman-Catholic church...etc. However, the analysis of the media context was carried out using aggregate data on the level of federal states. Aggregate-level information on media content, however, was retrieved from the AUTNES mass media analysis (Eberl et al., 2016; Kleinen von Königslöw et al., 2016) instead of official institutions as it was the case in the chapters on social and economic context.

The analyses of economic and social context were conducted using three-level multilevel analysis (Hox, 2010; Kelvyn Jones, 1991; Kelvyn Jones et al., 1992). Contextual impact was investigated on two different aggregate levels (political districts that are nested within regional constituencies) with the third level being the individual level of respondents. By doing so, it was possible to investigate which of the two aggregate levels does have a stronger impact on individual party preferences.

The media context, however, was investigated using a stacked dataset and respondents' propensity to vote (PTV) for political parties as outcome variables (van der Eijk et al., 2006). Because of the long data format of stacked datasets and data availability, only one aggregate level (that is federal states) was investigated while the second level was respondents. Conclusively, the data structure was PTVs that are nested within respondents that are nested within federal states.

8.1. The Impact of Context

After the analyses was conducted, what do we know regarding contextual impact in Austria? First, and as already expected at the beginning, one can state that contextual impact on party preferences is rather small. The intra-class correlations that shows the share of variance that can be explained through regional variation (that is location in space) is rather small for every party. As shown in section 4.4, the ICC on PD level is around 3 per cent at the most and even lower on RC level. The lion's share of variance in individual party preferences, however, can still be explained on the individual level of voters and, thus, by investigating these voters. So why should we even care to further investigate contextual impact and regionalisation of party preferences in depth?

As Marsh (2002) already suggested, we should not invest too much resources on the investigation of contextual effects (or, as he puts it, compositional effects) unless there is good reason to do so. Instead, global effects of the spatial context (that are e.g. different parties running for election in certain districts and other general differences between constituencies that cannot be aggregated from lower-level units and are characteristics of spatial contexts as such) should be investigated if we want to take contextual impact into account. However, the spatial distribution of votes presented in section 3.3 can be regarded as one good reason to have a closer look on contextual influence in Austria. As we have seen, there is an East-West divide in

Austrian voting behaviour and party preferences seem to be spatially clustered. So, the preconditions for the investigation of contextual impact in Austria were somewhat promising.

The broad investigation of different types of context is another reason why this study was necessary. Even though the results of the analyses were mixed and influence of contextual impact was rather small in most cases, we know more about contextual impact in Austria than before these analyses were conducted. Hypotheses regarding the economic context, social contextual influence, and the impact of the spatial media context were tested using similar statistical models and using the same individual-level data. Thus, the broad investigation and definition of context in this thesis was another good reason to have a closer look on contextual influence on party preferences since we now have more in depth knowledge about different types of context and how they influence party preferences.

Regarding the different levels of analysis, we have seen that the lower level of PDs always seems to be more important than the higher level of RCs. This had been presented using the ICCs in section 4.4 but also showing variation partition coefficients (VPCs) in section 5.4.4 and section 6.3.3. In these tables, we clearly see that variation is much stronger on the lower level of PD and that correlation between observations is higher on the lower level of PDs than it is on the higher level of RCs. Thus, moving down the scale and investigating contextual impact on the lowest level possible still seems to be a better choice than analysing contextual effects on higher levels. So it might be a good choice to move to an even lower level than PD in future research in order to investigate contextual effects (see Ron Johnston et al., 2001a; Ron Johnston et al., 2005 on spatial scales for contextual analyses).

Turning to the results of the analysis of economic context, we have seen that there is no clear government and opposition party dividing line: Especially in the investigation of perceived regional economic performance (that is not a contextual effect in the true meaning of the word but a necessary analysis regarding this chapter's research interest) we have seen that there are similar effects for SPOe, OeVP, and the Greens on the one hand and FPÖe and Team Stronach on the other hand. The same is also true (but to a smaller extent) regarding the impact of the perceived national economic performance. Thus, this line seems to run between populist-right parties and the other parties running for election.

Regarding the impact of aggregate economic variables, we have also seen that there is no clear dividing line between government and opposition parties. Instead, it looks like the effects of aggregate economic variables have mostly a party specific impact that might be depending on the parties' policy position. Thus, it looks like individual-level economic voting approaches (with their implications of voting for governing or opposition parties in accordance with contextual economic circumstances) might not be the best choice when investigating contextual effects of the economy. Instead, it might be better to test party specific hypotheses when analysing the economic context, instead of following the proposed dividing line between governing and opposition parties and, thus, to try transferring an individual-level framework to the higher level of context.

Additionally, some results indicate that not every variable used in this analysis of the economic context was equally well suited for being used in this type of study. For instance, this can especially be stated regarding the change of housing prices that had been used as a proxy measure for regional inflation. However, this variable revealed other interesting results that might not have been revealed otherwise: The change in housing prices seems to be an only poor indicator of regional inflation but seems to capture progress of voters' investments in housing. Conclusively, another indicator needs to be found for investigating the impact of regional inflation (even though this might be hard to achieve). Thus, future studies also must evaluate variables regarding their appropriateness to capture contextual effects.

In the analysis of the social context, party specific hypotheses were investigated. Since there was no broad theoretical framework to lean on, different theoretical frameworks and empirical findings were used for hypothesis testing. Conclusively, the results were more meaningful than those of the investigation of economic context.

First of all, there was no evidence for group threat theory (Blumer, 1958) operating on contextual level but only little evidence for contact hypotheses (Allport, 1954); since the higher the share of foreigners is the higher are also preferences for left-wing parties that usually stress an immigrant-friendly political agenda. However, this finding was accompanied by another finding that shows that there is no impact of foreigner share on preferences for right-wing or radical-right parties and, conclusively, no evidence for group threat theory on contextual level in Austria. Thus, the rather mixed findings of contextual investigations of these two theories are

supplemented by another finding that shows that the total share of foreigners is not related with increased support for radical-right parties but instead correlated with higher support for left-wing parties.

Other findings were either quite novel or sometimes spurious: For instance, we have seen that there is a negative impact of contextual social inequality on preferences for parties that oppose redistribution policies; a finding that should be investigated in more depth: On first glance, it seems as if voters living in contexts with a large extent of social inequality do not want the situation to become worse. Nevertheless, they do not want the situation to become better since there are no higher preferences towards left-wing parties that support redistribution policies either. Additionally, there is also a positive impact of agriculture and forestry share on SPOe while there is no positive effect of Catholic share on OeVP preferences (but instead on preferences towards the Greens). These findings seem to be quite spurious and hard to understand; however, it is not unlikely that non-members of these groups (e.g. service sector employees or Non-Catholics) must close ranks in order to not get suppressed by group members and, thus, have higher preferences towards parties that are more likely to take a stand for their interests.

However, there were also some pitfalls that might have prohibited clearer and more meaningful results. For instance, Catholic share was measured on the regional level of Catholic dioceses which is a much higher-level regionalisation than the PD or RC. However, even though moving down the analytical scale might have revealed some more meaningful results, as of the time of writing there was no other lower level data available and, thus, this higher-level regionalisation had to be included in the analyses. Similar can be stated regarding the unemployment share and labour market districts in the analysis of the economic context: The analytical level might have been too high; however, this is the lowest level on which unemployment is reported by the Austrian national labour bureau and therefore the only administrative data that can be included in such an analysis.

Additionally, the total share of employees and workers in the primary sector might have been also an only ill-suited proxy measure for the class cleavage (Lipset & Rokkan, 1967) which could also have led to the spurious results reported in chapter 6. Last, the exclusion of other news outlets than print media from the analysis of the

media context might have also prevented deeper insights into the media context but was necessary due to the lack of data availability regarding other types of media.

However, we must keep in mind that this thesis' dependent variable measures general party preferences towards the parties included in the AUTNES voter surveys (in the chapters on the economic and social context) and propensity to vote for these parties (in the chapter on the media context). Thus, these variables must also be regarded as being less affected by context than the vote, which is the "easiest prey to contextual effects" (Brown, 1981: 439) and the dependent variable in most studies on contextual effects. Conclusively, this thesis revealed some interesting results regarding *contextual impact on party preferences* in multiparty systems, which must not necessarily also result in *contextual voting* (and might also be weaker than contextual voting).

8.2. Cross-Level Interactions and Modes of Transmission

Besides the investigation of direct contextual effects, investigating cross-level interactions of aggregate variables and individual-level variables was also central in this thesis. It was shown that contextual influence is sometimes moderated by the time respondents lived in their PD. This was the case regarding the contextual impact of social inequality on OeVP preferences, but also regarding changes in net incomes and preferences for OeVP or the Greens. In all of these cases, the effect on party preferences turns its direction with increasing years of living in the same PD. Thus, we see that context operates differently depending on individual-level characteristics: What might have a positive impact on respondents with a low level of contextual linkage (that was operationalised through the years a respondent already lived in her PD) might have a negative impact on respondents with a high level of contextual linkage (et vice versa). Not every voter is affected by her context in the same way as other voters are; and sometimes the same voter will be affected differently by the same contextual characteristics a few years later.

Hence, investigating cross-level interactions using the number of years respondents had already been living in the same context might be only the first step in the examination of cross-level interactions in contextual analysis. Other possible individual-level variables that moderate contextual influence should be analysed more closely (if available); e.g. identification with one's region, assessment of

regional quality of living, or general assessment of regional development would be highly interesting variables that are likely to moderate spatial contextual influence.

Coming back to this thesis' analyses; maybe the most interesting moderating effect of contextual linkage had been observed regarding the increase in housing prices and preferences towards the governing parties SPOe and OeVP. In Figure 8 and Figure 9 we have seen that the increase in housing prices has a negative effect on both governing parties first. This effect then turns after about 20 years of living in this PD and, most likely, the same house or apartment. At the right-hand side of this scale that indicates a long time of living in the same PD this effect is finally positive. To sum up, while increasing housing prices seem to negatively affect party preferences for governing parties of those who might have just moved to this PD, it has a positive impact on those who are already living there for a long time.

One possible explanation would be that this aggregate variable does not measure regional inflation but rather the investment that people who recently moved to that PD had to make. In case a respondent invested a longer time ago in housing, increasing prices are favourable development and, thus, preferences for governing parties are higher. In case this investment had just been made, this is rather unfavourable and preferences for governing parties could be lower. However, this aggregate variable of housing prices should be elaborated further in future research.

Summing up, we have seen that contextual linkage sometimes moderates contextual impact and sometimes it does not. This depends on the contextual variable used as well as on the party that is investigated. So, again, additional research is needed for assessing the underlying mechanisms of moderation of contextual linkage. Additionally, this analyses also relied on a quite rough measure of contextual linkage that could also be improved by taking other indicators of contextual linkage into account and combine them to create a joint measure. Thus, in future research that aims to investigate contextual impact a more accurate definition and operationalisation (if possible) should be applied that maybe also takes inhabitants' 'senses of place' into account by simply asking them about their identification with the region they are living in and the place at which they are located.

The modes of transmission of context, namely the information flow and processing model of contextual impact, was not formally tested in the chapters on social and economic contextual influence. Moreover, this framework was only used as a

necessary theoretical foundation of these empirical analyses, even though its premises were not the focus of this study (and would not have been testable given the data and available resources). However, one of these modes of transmission of contextual influence was explicitly investigated in the analysis of the media context in chapter 7, even though the modes of transmission had been reduced to only one for analytical reasons.

In this analysis, the sample had been divided into groups of roughly the same size and separately investigated to assess the role of political discussion with others on media contextual impact. The impact of mass media context, however, was basically the same (that is non-existent) across all groups of political discussion frequency or homogeneity of political discussion networks. Thus, we found out that the impact of the media context is the same regardless of the amount of political discussion, or the homogeneity of one's discussion network.

8.3. Final Thoughts

So, what have we learned after this investigation of contextual influence in Austria? As already said, since the lower level of PDs was always more important compared to the higher level of RCs, one should aim for the lowest possible level when conducting contextual research; especially in Austria or maybe other multiparty systems in general. However, the results on PD level are still rather small compared to other individual-level analyses that only investigate the association between different variables on the same analytical level. Additionally, the effects are even smaller than in similar studies that had been conducted in other countries, e.g. the United Kingdom or the United States of America.

There are two possible reasons for the comparatively low effects of spatial context on political preferences in Austria; one is related to the research design and data used in this study, while the other targets the case of Austria that had been investigated in this thesis. Both shall be discussed in this final section.

First, the research design itself, or to be specific the data included in the analyses, might not have been best for investigating contextual effects. This especially applies to the aggregate data used in this study: In case aggregate data should be combined with individual-level data to investigate contextual impact, researchers are reliant on official sources (e.g. the national statistical office or the national labour bureau) in

most cases. In almost all cases, this administrative data had been carried out and collected for other reasons than its academic use.

Nevertheless, this data is also hard to find the lower the analytical level is, especially in Austria with a rather young history of data collection, data storage, and publication of data. Additionally, only data that is publicly available and free of charge was used in this investigation. Consequently, time points and periods of time of data collection and publication of data vary between different variables (even though they are always close to the year of Austrian national election 2013). However, these official sources are still the only sources that provide this data at all. Thus, one must cope with these limitations in the analysis of aggregate-level data.

Even though AUTNES provides high quality individual-level data on the 2013 Austrian national elections its focus still lies on the investigation of individual-level associations and other research questions apart from contextual research. Thus, sampling of respondents, collection of data, and questionnaire development did not make much allowances for contextual research and accompanying research interests and questions. Of course, investigating the research questions and contextual effects was still possible using AUTNES data, however, results might have been better if the data had been carried keeping this in mind.⁶⁸

Second, larger contextual effects had been observed in other countries while the contextual effects reported in this study were rather small. However, most contextual research investigates other democracies than Austria as well as other political systems than the Austrian political system, e.g. a two-party system in the United States of America or a majority voting system as in the United Kingdom. Additionally, contextual impact on voting and party preferences had also been observed in highly federalist countries such as Belgium or Germany, with the population size of the latter also being ten times larger than the population of the rather small country of Austria. This difference in country and population size is also true for the United Kingdom or United States of America.

Thus, one could ask whether Austria is too small for proper investigation of contextual effects since this country is only as large as a handful of regions in

⁶⁸ Which, of course, is only seldom the case; especially when the investigation of contextual effects is the research interest of a sole PhD candidate without extra funding for this kind of study.

England.⁶⁹ It is up for debate whether political behaviour and party preferences are as regionalised in Austria as they are in other countries, or whether Austria is too small in the first place to develop strong senses of place and place specific forms of behaviour: One has to keep in mind that the Austrian population is equivalent to only one-tenth of the German population and its size is only slightly larger than the German state of Bavaria. Thus, developing unique mind-sets, senses of place, and a unique political behaviour within these literally (and figuratively) narrow borders could be rather hard if not even highly unlikely.

Additionally, there might also be historical reasons why senses of place and place specific forms of behaviour might be comparatively underdeveloped in Austria: As of the time of writing this thesis, the Republic of Austria with (more or less) its current borders is not even 100 years old. In the early years of the Republic of Austria, it was hard to incorporate the “sense of Austria” in the first place, while most Austrian citizens identified rather as Germans than Austrians. Thus, incorporating additional senses of place besides the “sense of the nation” might have been a demanding task that might not have been as successful in Austria as in other comparable countries regarding country size and population (such as e.g. Belgium with its divide between Flemish and Walloons). Moreover, another interesting question is whether a European “sense of Europe” will accompany national and regional identities or whether it will replace one of these two spatial identities (or both).

However, this first study of contextual effects on party preferences in Austria and cross-level interactions shed some more light on contextual impact in general, its components, and political behaviour in Austria in specific. Additionally, we also gained deeper insights in this country’s political geography and the role of different analytical levels in the investigation of contextual effects. Finally, we also have more knowledge on the moderating effect of time on contextual influence: As we have seen, time (or contextual linkage, as it was labelled in this thesis) can change the direction and strength of contextual impact. Thus, investigating the role of time *and* space might reveal some interesting results in political science.

⁶⁹ Similar applies to Germany, the United States of America and most other countries of larger size.

9. Appendix

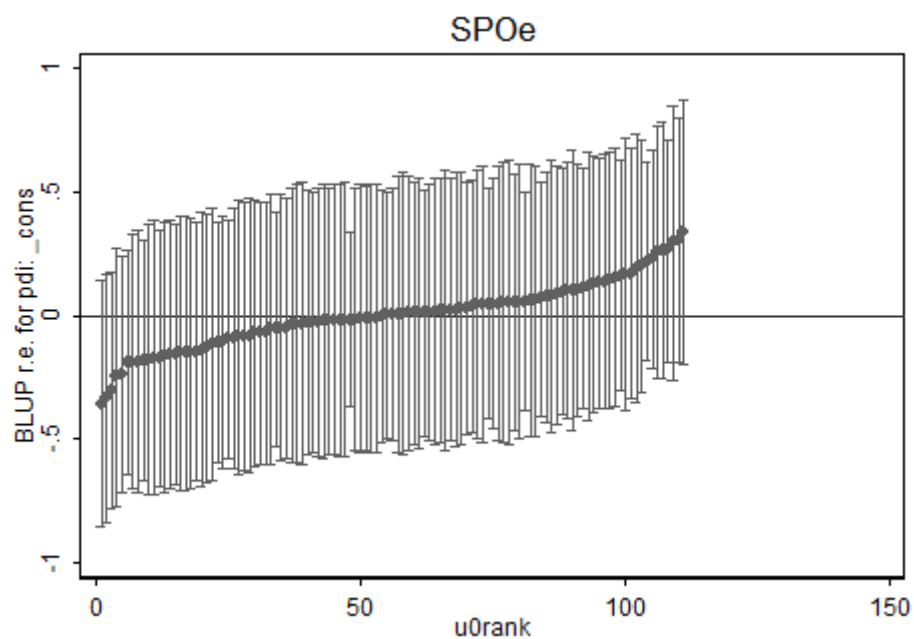


Figure 15: SPOe Level 2 Residuals (PD) Caterpillar Plot

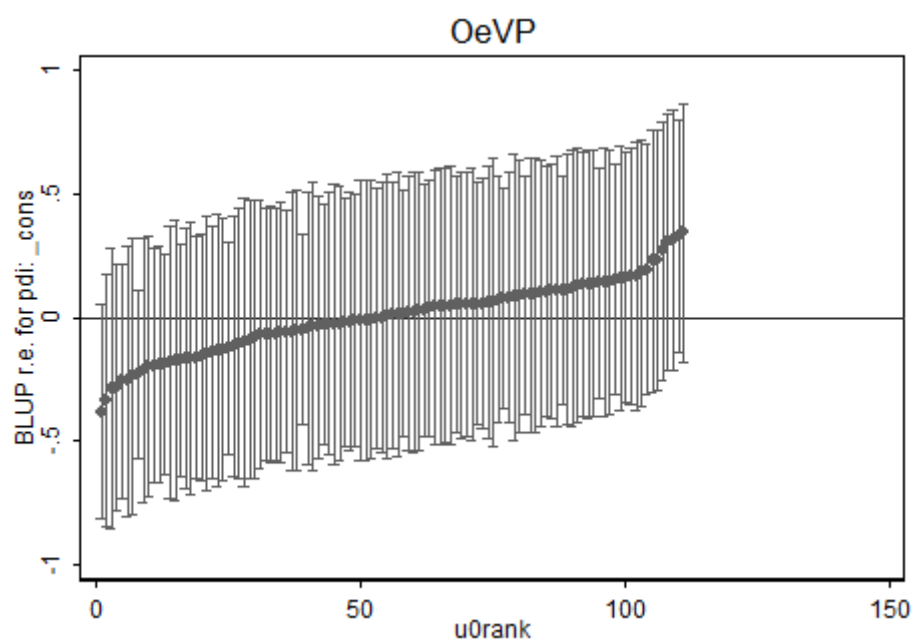


Figure 16: OeVP Level 2 Residuals (PD) Caterpillar Plot

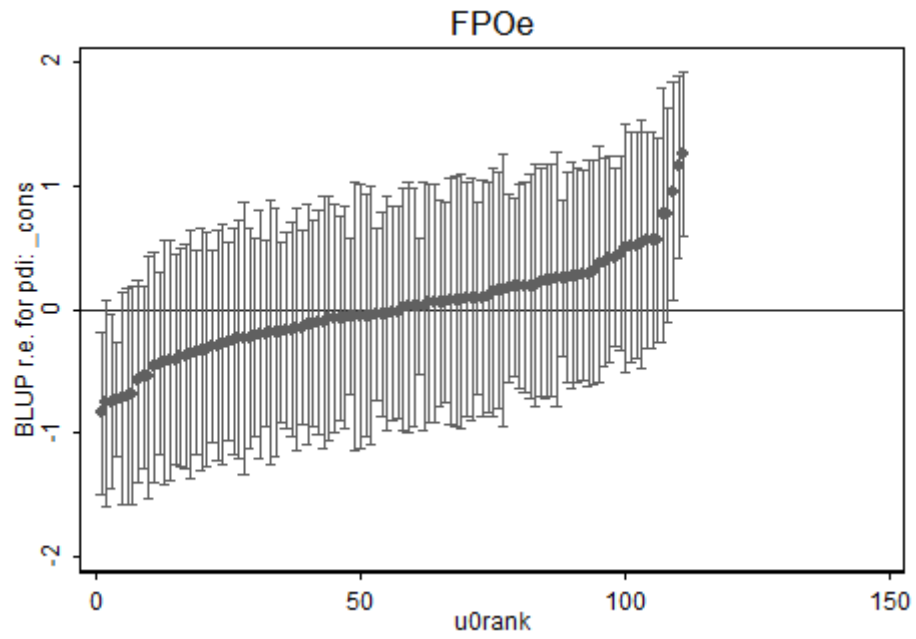


Figure 17: FPOe Level 2 Residuals (PD) Caterpillar Plot

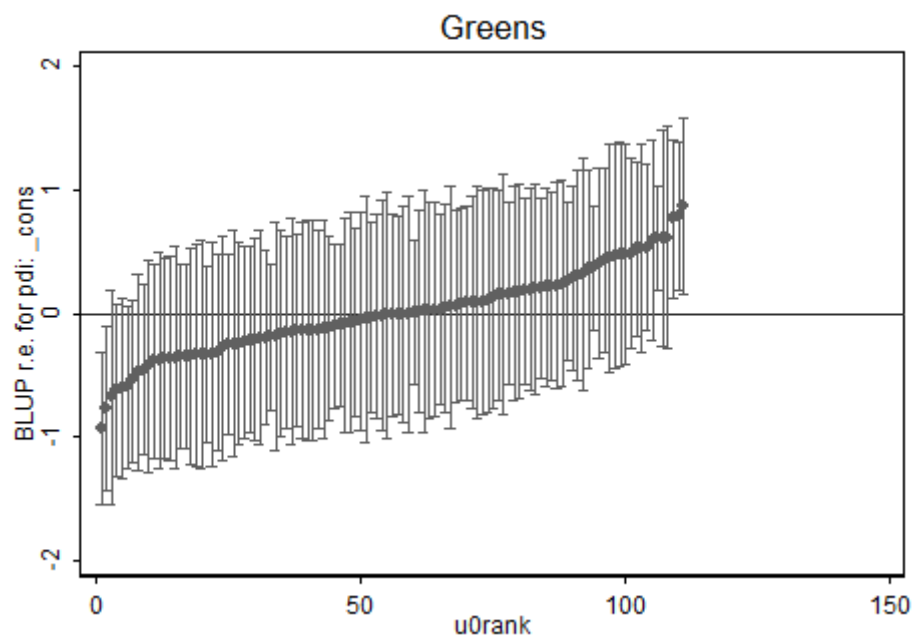


Figure 18: The Greens Level 2 Residuals (PD) Caterpillar Plot

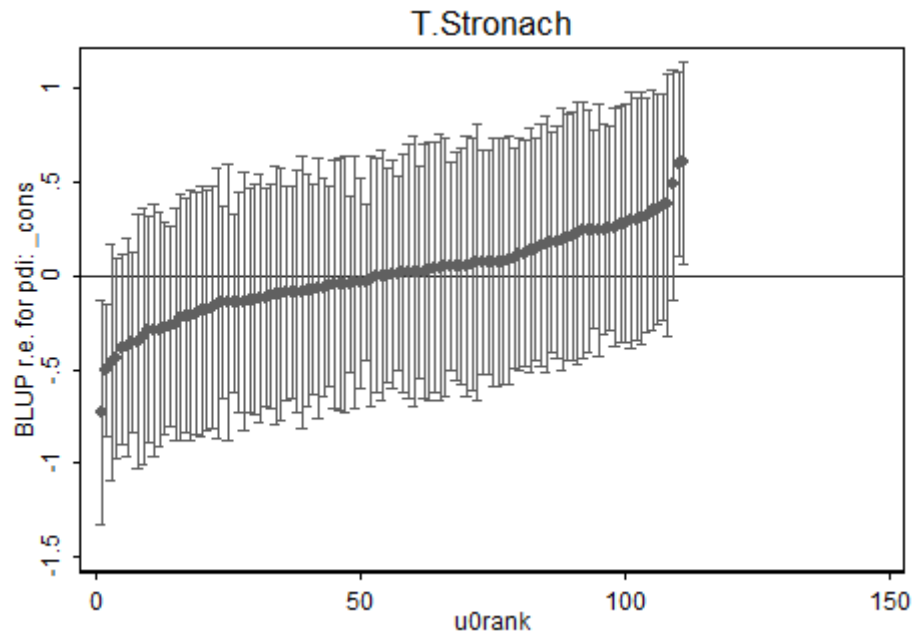


Figure 19: Team Stronach Level 2 Residuals (PD) Caterpillar Plot

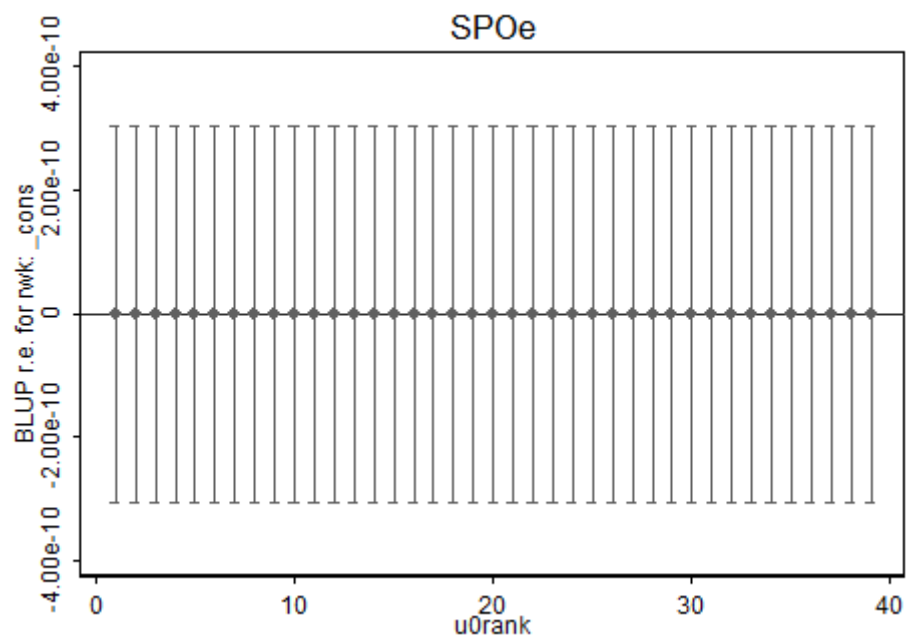


Figure 20: SPOe Level 2 Residuals (RC) Caterpillar Plot

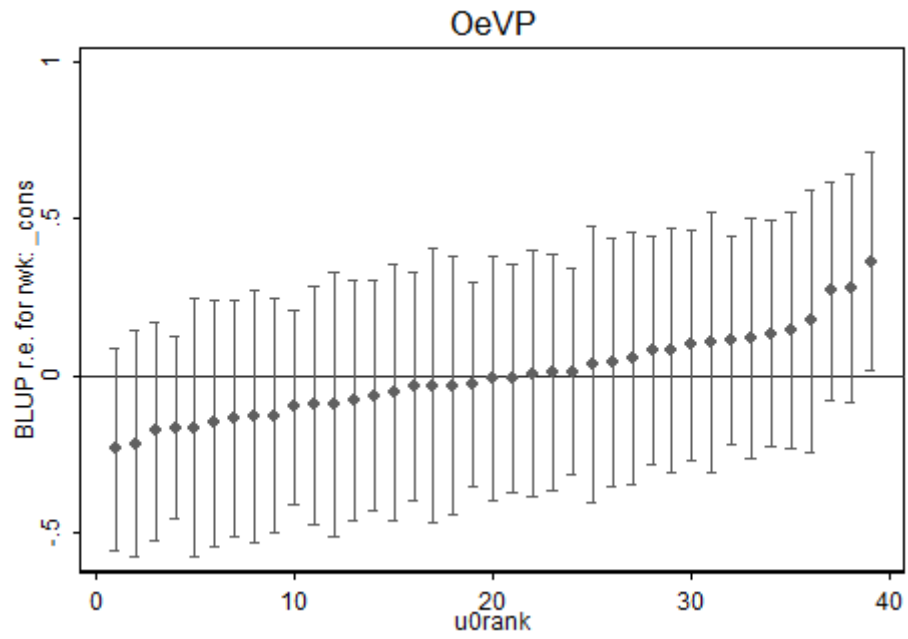


Figure 21: OeVP Level 2 Residuals (RC) Caterpillar Plot

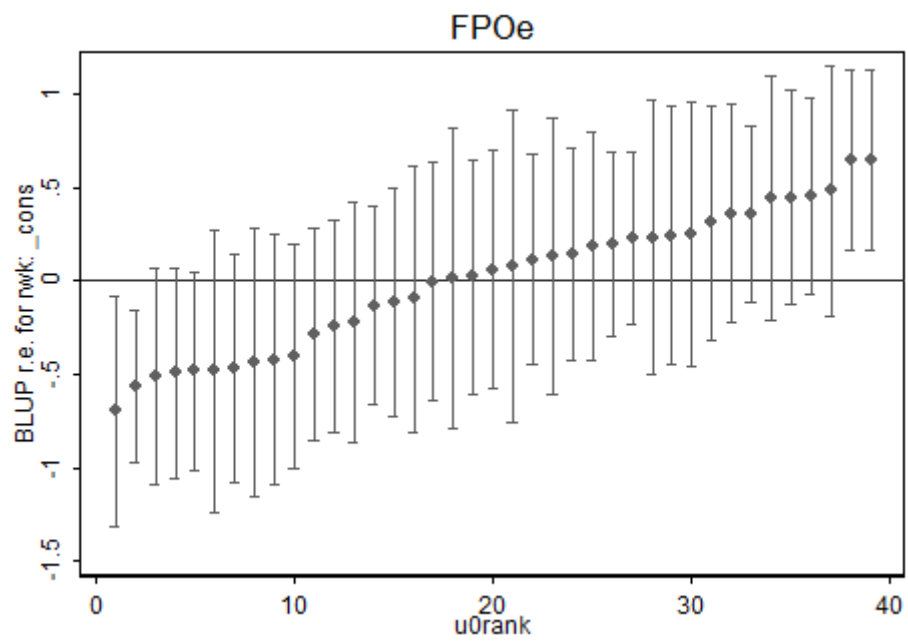


Figure 22: FPOe Level 2 Residuals (RC) Caterpillar Plot

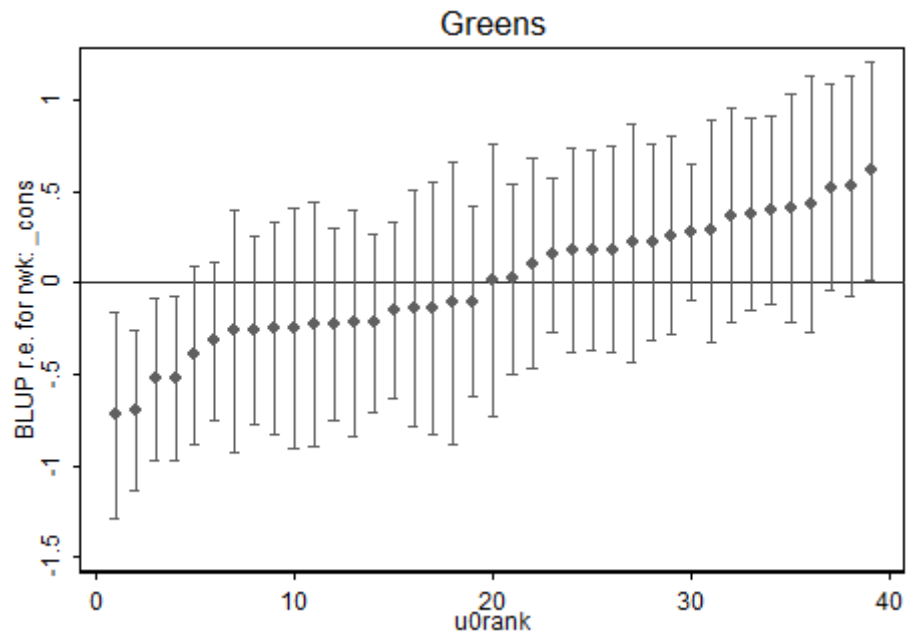


Figure 23: The Greens Level 2 Residuals (RC) Caterpillar Plot

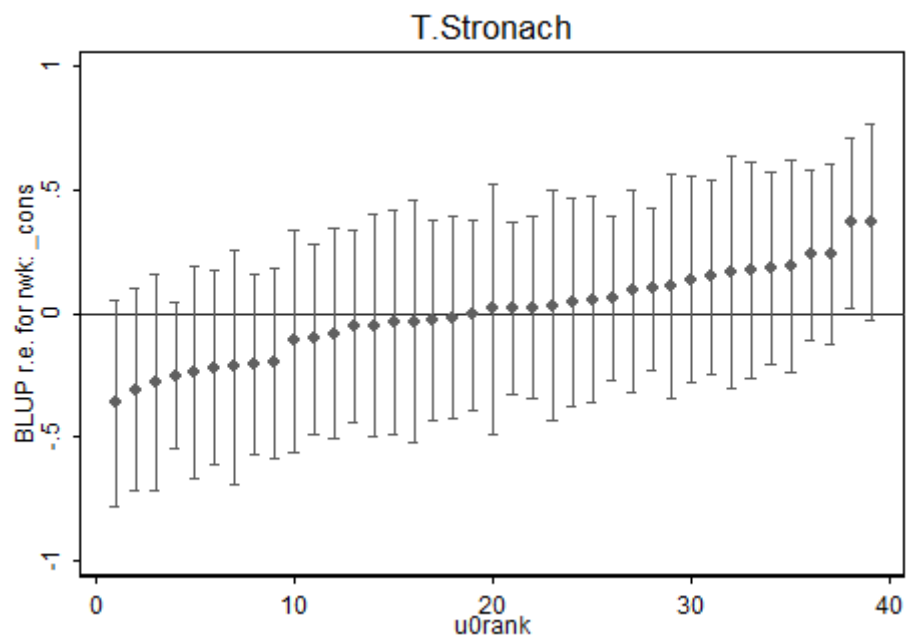


Figure 24: Team Stronach Level 2 Residuals (RC) Caterpillar Plot

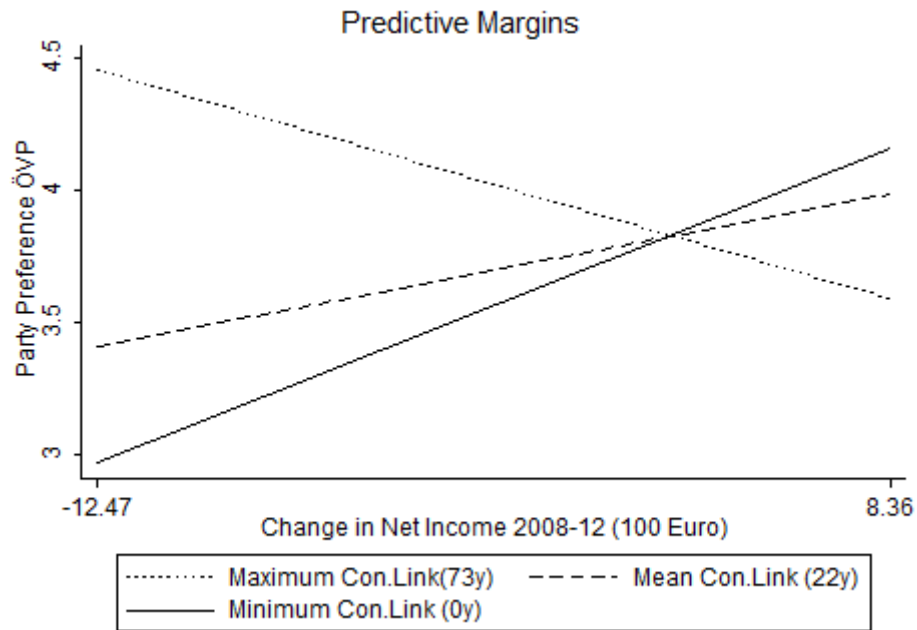


Figure 25: Predicted Relationship between Change in Net Incomes and OeVP Preferences at Selected Levels of Contextual Linkage

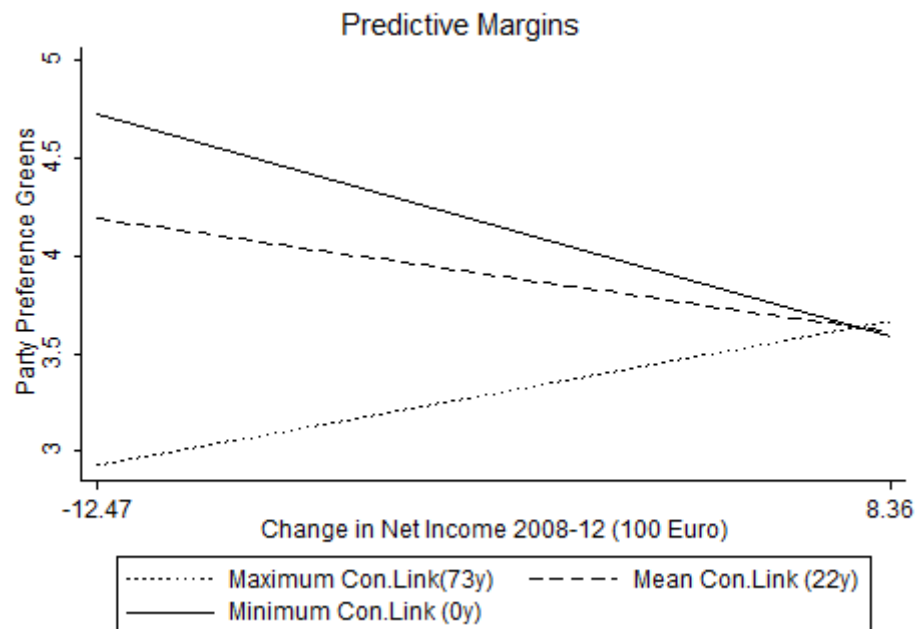


Figure 26: Predicted Relationship between Change in Net Incomes and the Greens Preferences at Selected Levels of Contextual Linkage

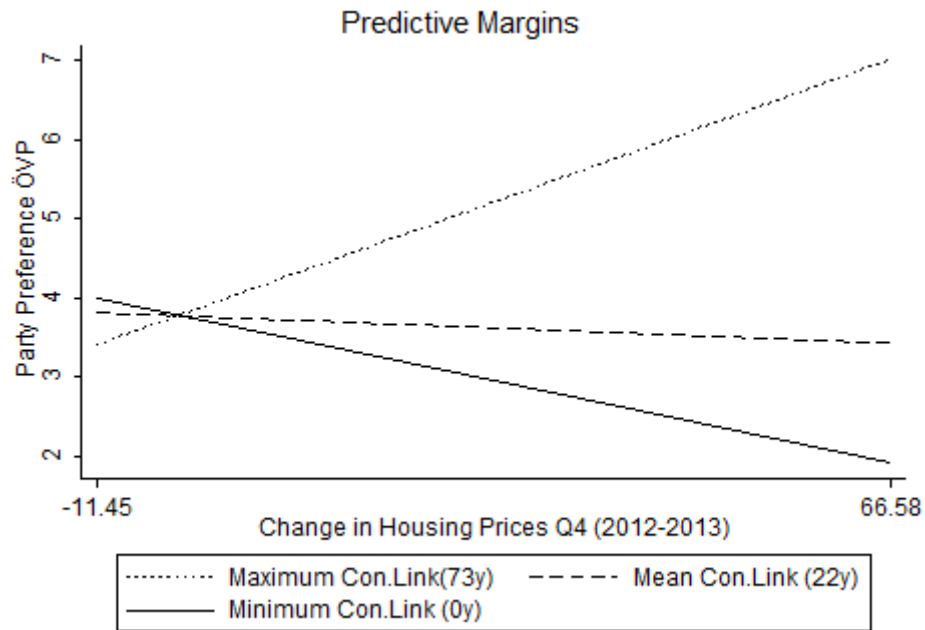


Figure 27: Predicted Relationship between Change in Housing Prices and OeVP Preferences at Selected Levels of Contextual Linkage

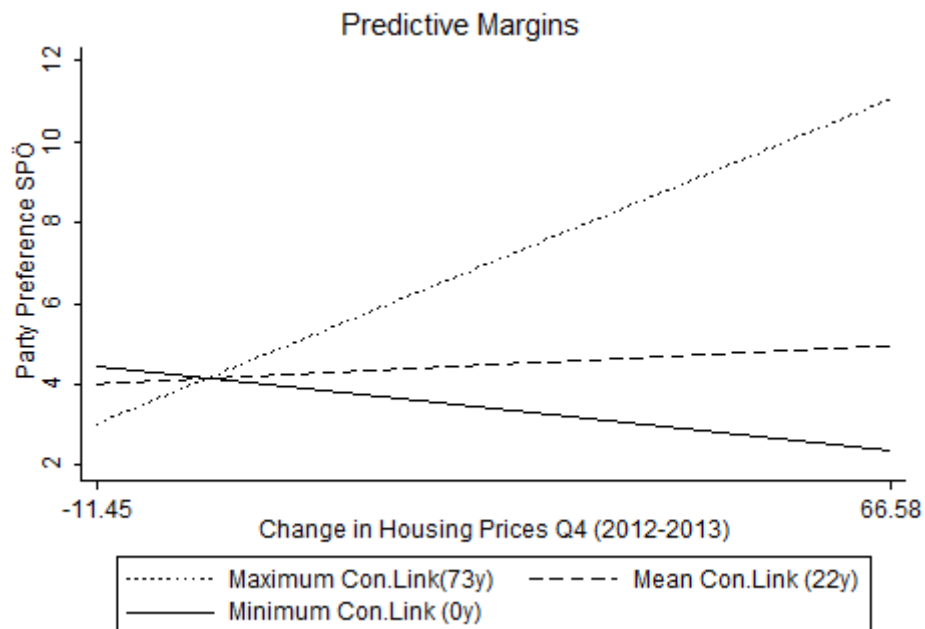


Figure 28: Predicted Relationship between Change in Housing Prices and SPOe Preferences at Selected Levels of Contextual Linkage

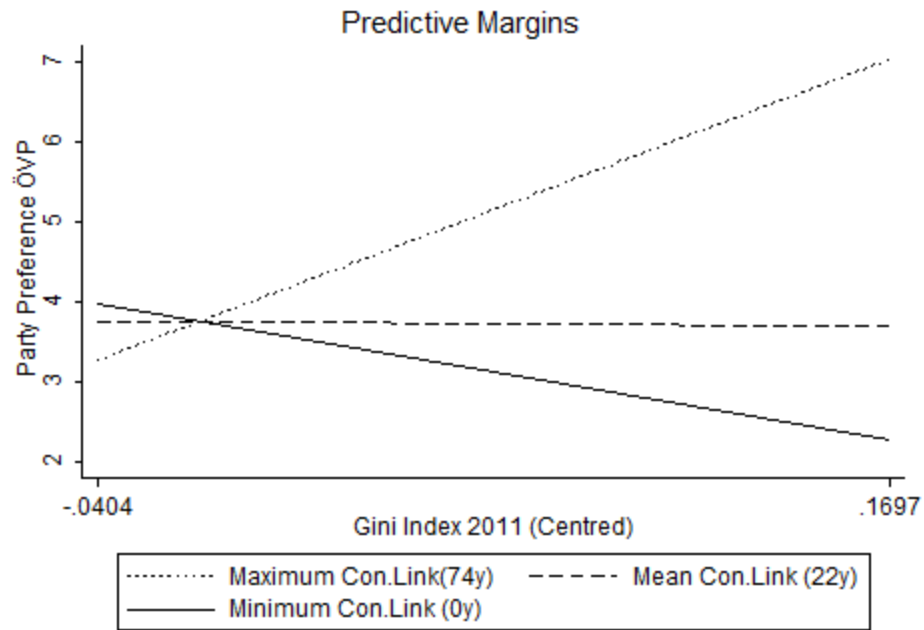


Figure 29: Predicted Relationship between Gini Index 2011 and ÖVP Preferences at Selected Levels of Contextual Linkage

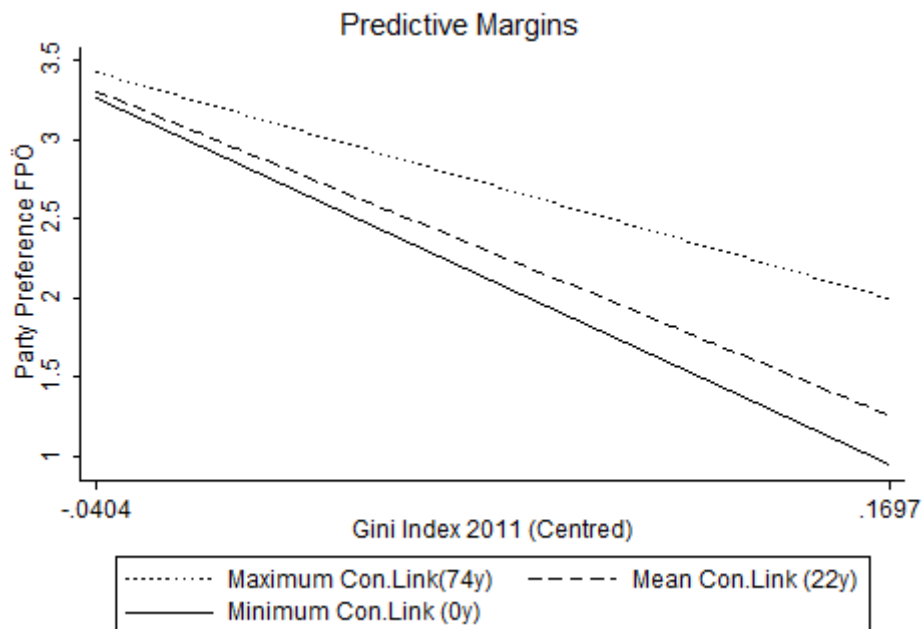


Figure 30: Predicted Relationship between Gini Index 2011 and FPÖ Preferences at Selected Levels of Contextual Linkage

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11. Abstract

11.1. English Version

In this study, a spatial definition of context is applied in order to investigate contextual (that is regional) effects on individual party preferences. Contextual effects include the economic context, the social context, and the mass media context of Austrian voters. Additionally, contextual effects are investigated on two different spatial levels; the lower level of political districts and the higher level of regional constituencies.

In this research design, aggregate data of the different types of context was merged with individual level data to assess the impact of aggregate level information on individual level party preferences using multilevel analysis.

Results show that the lower level of political districts is more important than the higher level of regional constituencies and that different parties are affected differently by context; even though the overall contextual impact is rather weak. However, the time respondents already live at their context (that is in their home region) moderates direction and impact of contextual effects.

11.2. German Version

Diese Dissertation untersucht den Einfluss von Kontexteffekte auf individuelle Parteipräferenzen unter Berücksichtigung einer räumlichen Definition von Kontext (im Sinne von Region). Kontexteffekte beinhalten dabei Einflüsse des ökonomischen, des sozialen oder soziodemographischen und des massenmedialen Umfelds auf Wählerinnen und Wähler in Österreich. Kontexteffekte werden auf zwei analytischen Ebenen, der niedrigeren Ebene der Politischen Bezirke und der höheren Ebene der Regionalwahlkreise, untersucht.

In diesem Forschungsdesign werden Aggregatdaten gemeinsam mit Individualdaten ausgewertet, um den Einfluss von Kontextinformation auf einer höheren Ebene auf individuelle Einstellungen auf niedrigerer Ebene zu untersuchen. Dies erfolgt mit Hilfe von Mehrebenenanalysen.

Die Ergebnisse zeigen, dass der Einfluss von Kontextmerkmalen auf Ebene der Politischen Bezirke einen stärkeren Einfluss auf individuelle Parteipräferenzen ausübt als Informationen auf Ebene der Regionalwahlkreise. Weiters werden Präferenzen gegenüber verschiedenen Parteien auch von unterschiedlichen Kontexteffekten beeinflusst. Auch wenn der Einfluss des räumlichen Kontexts insgesamt nur vergleichsweise schwach ausgeprägt ist, zeigt sich, dass die Wohndauer innerhalb desselben Kontexts (und damit innerhalb der Heimatregion der Befragten) sowohl Richtung als auch Stärke des Einflusses moderiert.