UNIVERSITY OF CALIFORNIA

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Globalization, Realignment, and Geographic Cleavages

in Four Developed Democracies

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Political Science

by

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ABSTRACT OF THE DISSERTATION

Globalization, Realignment, and Geographic Cleavages in Four Developed Democracies

by

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In recent years, developed Western democracies have seen the rapid rise of new political forces, including movements commonly described as "populist", "nationalist" or "sovereigntist", but also new forms of opposition against these movements. A growing body of research identifies these changes as the product a realignment driven by the differential impact of globalization on these societies. In this dissertation, I build on this research by arguing that geography plays a key role in shaping this realignment. The benefits of globalization tend to concentrate in large metropolitan areas, while the rest of the country bears the brunt of its negative effects. As a result, developed democracies see the rise of a political cleavage opposing these two geographic entities, with large urban areas increasingly distinguishing themselves from less-dense communities in their voting patterns and other political behaviors. I test this argument by examining geographic

variations in socioeconomic and electoral patterns in four major developed democracies: France, Germany, the United Kingdom and the United States. I find clear evidence for this dynamic in three countries, with Germany presenting some null findings. Complementing the geographic analysis, I also examine individual-level attitudes and behavior through recent, high-quality survey data from the United States. This data reveals that the political cleavage between large urban areas and the rest of the country persists even when controlling for individual socioeconomic characteristics. This research sheds light on a major transformation in Western politics, which has already resulted in stunning electoral upsets with major repercussions for world politics.

The dissertation of Antonio Isidoro Lorenzo Vitalone is approved.

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Introduction

On June 23, 2016, British voters took part in a referendum to decide whether their country should remain a member of the European Union or withdraw from it. Although polling had indicated that public opinion was closely divided on the issue, most observers of British political life were shocked when, as the night progressed, it became apparent that a majority of voters, about 52%, had decided to leave. Less than six months later, an even greater surprise shook political observers across the world when Donald Trump garnered a majority of the Electoral College that selects the President of the United States. A highly controversial figure frequently accused of sexism, xenophobia, and erratic behavior, Trump had largely been dismissed as a candidate over the course of the campaign. In the weeks, months and years that followed, a narrative began to emerge which linked the aforementioned "Brexit" vote, Trump's victory, as well as the success of parties such as France's National Front. These events were interpreted as common manifestations of a loose transnational political movement, described as "populist", "nationalist" or "sovereigntist". The substantive policy agenda of this movement

varied considerably from one account to another, but it was commonly associated with hostility toward international institutions and rules, impositions on national sovereignty, global economic integration, and immigration. In the wake of Trump's election, coverage of "populism" often ascribed an air of inevitability to its rise.

Then, less than a year after the "Brexit" referendum, a new election in a major European country seemed to undermine this narrative. On May 7th, 2017, Emmanuel Macron, a political newcomer with a platform of explicit support for the European Union and free trade, was elected as France's President. Macron decisively defeated Marine Le Pen, the candidate of the National Front and one of the foremost rising stars of the "populist" movement. This apparent setback sparked a new round of speculation about the nature of "populism", its origins, its future, and the potential for a backlash against it. A multitude of arguments, conjectures and theories have flourished around these topics in the years since, ranging from sensationalistic media narratives to erudite academic conversations. Regardless of the specific claims being levied and of the intellectual rigor of the conversation, it is undeniable that this lens of analysis has become crucial to understanding the nature of politics in contemporary developed democracies. Throughout Western Europe and North America, political competition increasingly seems to revolve around the clash between "populists" and their opponents.

What is the nature of this shift in political competition, and what can account for its unfolding? As noted, scholars have not shied away from attempting to answer this question. In this research project, I follow a particularly influential strand of political science sparked by Kriesi et al. (2008), which argues that Western politics are undergoing a realignment that pits the "winners" from globalization against its "losers". I attempt to develop and extend this argument, particularly in examining its geographic implications. Drawing from recent works, I argue that globalization's benefits have been distributed unevenly across the territories of

developed democracies, generally favoring the largest urban areas within each country at the expense of smaller cities, distant suburbs, exurbs, and rural areas. This geographic disparity in globalization's impact in turn brings forth a geographic cleavage, as the two territorial entities increasingly diverge in their political attitudes and behaviors. This process thus constitutes a realignment. Over the following chapters, I endeavor to investigate whether such a realignment has occurred in four major developed democracies: France, Germany, the United Kingdom, and the United States.

Chapter I lays out the theoretical foundations upon which this research is based. In it, I examine the state of academic research on the recent trends that have rocked the politics of developed democracies and the contentious arguments pertaining to their origins. I focus on the frame of analysis developed by Kriesi et al., examining its logic in detail. I then bring to bear conclusions from recent works which, most notably, point to a possible geographic component to the realignment. I conclude this chapter by laying out the three hypotheses to be tested over the course of my research. In Chapter II, I introduce the four countries that will provide the setting for these tests, as well as the data employed to conduct them. I briefly survey each country's institutional structure, party system, and recent political history, then move on to introducing the geographic subdivisions used to measure the differential impact of globalization on each country's territory, and finally introduce the dependent variables of the upcoming analysis. The final three chapters delve into the empirical analysis at the core of this research, each testing one of the hypotheses laid out in Chapter II. Chapter III examines whether the benefits of globalization are indeed concentrated in large urban areas, while the rest of each country's territory is more likely to experience its drawbacks. I find substantial evidence for this claim in every country, albeit more clearly in some than in others. Chapter IV then addresses the central question of realignment: have the voting patterns in each country increasingly diverged along the geographic lines previously identified? Three countries show

evidence of this divergence, while Germany provides a null finding that tests the limits of this theory. Finally, **Chapter V** takes the analysis one step further by examining individual-level survey data from the United States, finding that the political cleavage between large urban areas and the rest of the country persists even when controlling for individual-level drivers of political attitudes. I conclude by summarizing these findings, examining their significance, and charting some potential avenues for future research.

Chapter I

Globalization, Geography, and Political Cleavages:

A Theoretical Framework

The rapid reshaping of party systems and political competition in a number of developed countries over the past decade has not gone unnoticed by political scientists. Indeed, the past five years alone have seen a flurry of research seeking to identify the nature and causes of these changes. Such studies, which differ markedly in their hypotheses and their methodological approaches, unsurprisingly come to different and sometimes contradictory conclusions. In addition to these recent contributions, some of the broader theories and concepts elaborated by scholars over the past decades also prove useful as analytical tools applied to the current patterns. To identify worthwhile angles for further inquiry in this area of research, it is first necessary to review these various contributions, highlighting the most salient patterns that emerge from them. That is the purpose of this chapter. Given the vast fields of

study involved, such a review cannot aspire to exhaustiveness. Nevertheless, I shall canvass a wide range of sources to illustrate the key concepts and debates lying at the intersection of the study of globalization and political realignment. I draw on these sources to build a theoretical framework, from which I derive the hypotheses to be tested in the subsequent chapters.

I begin this overview by examining the development and significance of the notion of realignment. First coined to describe a recurring pattern in U.S. elections, the concept has given rise to a full-fledged theoretical field among political scientists, with extensions far beyond its original area of reference. At the same time, realignment remains a somewhat nebulous notion, often receiving different definitions by different scholars. The first section of this chapter will shed light on these complexities, leading me to formulate the specific definition of realignment that I employ for this research. In the second section, I use this conceptual lens to examine the changes that have affected developed democracies over the past decades. I provide a brief overview of those changes, before reviewing the main explanations that scholars have provided to account for them. I highlight the thesis, first authoritatively laid out by Kriesi et al. (2008), that these dynamics reflect a realignment of Western European politics driven by the impact of globalization. This thesis emerges as the most compelling explanation for observed dynamics, and, when supplemented with insights from other theoretical approaches as well as more recent findings, provides the theoretical underpinning for this research project. In the third section, then, I examine some further implications of this argument. One area that deserves particular attention is the potential geographic dimension of this realignment: recent findings, along with an ambitious if untested theory, suggest that the differential impact of globalization on different types of geographic areas within a country might be a key driver of the emerging political cleavage. Testing this argument on an extensive scale is one of the primary objectives of my research. I draw from all these strands of literature in the fourth and final section, in order to formulate the three hypotheses that will be tested in the empirical chapters that follow.

The notion of realignment represents the natural starting point in the elaboration of my theoretical framework. In order to ascertain whether the politics of developed democracies have undergone a realignment, and, if so, inquire into its causes, it is first necessary to define the term precisely and discuss its operationalization into a dependent variable. From its inception more than six decades ago, the notion has undergone numerous articulations and reformulations. Initially employed to describe an empirical phenomenon in the study of elections in the United States, it has sparked an influential strand of academic literature, which increasingly extends to other countries. In this section, I first discuss the concept's origins and history, along with its applicability outside of the American context. I then present my own definition of the concept, rooting it in another influential notion in the study of comparative politics: Lipset and Rokkan's concept of political cleavage. I briefly consider the contentious question of the timing with which we should expect a realignment to unfold. Finally, I discuss the concrete ways in which a realignment might manifest itself in the political life of a country, thereby formulating strategies for its operationalization.

Origins and Development of the Concept

The concept of "realignment" was first introduced by V.O. Key, in his 1955 article, "A Theory of Critical Elections." Key noted that, setting aside minor context-specific deviations, the balance of party strength in U.S. elections, as well as the partisan loyalties of most individual voters, tend to remain remarkably stable from one election to the next. However, certain electoral cycles abruptly disrupt these patterns, causing a sudden and major swing in electoral outcomes, the shift of large groups of voters from one party to the other, and eventually the crystallization of a new, lasting partisan equilibrium. Key termed these elections as "critical" and described their outcome as a "realignment." The most commonly cited and studied example of this process was the 1932 Presidential election, won in a landslide by Franklin D. Roosevelt in the wake of the Great Depression, which ended an era of Republican dominance dating back to the Civil War and established the Democratic party as the prevailing force for the following four decades.

Key's paper proved considerably influential, sparking an entire field of American political science known as realignment theory. In the decades that followed, many scholars contributed to this field, expanding the concepts of critical election and realignment into increasingly sophisticated theoretical frameworks. Most notable among them were Walter Dean Burnham (1970), who theorized the existence of electoral "cycles" of roughly 30 to 36 years that separated each new realignment, and James Sundquist (1983), who reinterpreted realignment as a change in the object of the conflict between the two major parties. Debates continue among American political scientists regarding the most appropriate definition of a realignment. A growing number of them has also cast doubts on the concept's value, arguing that it fails to account for the complexity of political change throughout U.S. history (Shafer 1991, Mayhew 2004). Regardless, the majority of scholars would agree that, in its most basic formulation, realignment entails a significant and lasting change in the structure underlying a country's electoral outcomes.

Realignment in Comparative Perspective

Given the concept's origin, it is not surprising that most of the literature on realignments take a strictly American perspective, grounding the concept in the United States' specific institutional structure and political dynamics. For example, the conflict that Sundquist models occurs strictly between two parties. Third parties may emerge over the course of a realignment, but they are destined either to replace one of the two major parties, to be absorbed into one of them, or to quickly fade (p. 35-38). Recent works, however, have sought to expand the scope of realignment theory, by reformulating it in terms applicable to a wider range of political systems. One of the most notable such attempts came from French political scientist Pierre Martin, whose 2000 book applies an expanded version of realignment theory to the electoral evolutions of France since 1871. Martin's approach to realignment is rooted in the notion of "electoral order", a stable and cohesive pattern connecting voters' behavior with the structure of the party system, the output of public policymaking, and the relationship between citizens and the political elite. An electoral order can form in a multi-party system, as long as the number and relative strength of each party remains stable. A realignment, then, describes the breakdown of an existing electoral order and its eventual replacement by a new one.

Martin lays out a great number of hypotheses about the interconnection of the various components of an electoral order that are difficult, if not impossible, to verify. These claims are beyond the scope of my research, which limits itself to adopting Martin's view that realignments are a relevant notion regardless of the type of party system in which they take place. The *existence* of a party system, however, remains a crucial condition to the notion's applicability. Medium-term stability in the number of parties, their relative strength, and individual voters' attitudes toward them, is the norm throughout Western Europe and North America – making changes in these patterns, when they do occur, worthy of study. However,

such stability is significantly less common in many other areas of the world. For example, across most of the relatively young democracies of Latin America (Mainwaring & Scully, 1995) and Eastern Europe (Moser & Scheiner, 2012), party systems that lack these core features tend to experience wide and chaotic fluctuations from one election to the next. As there is no electoral order to be undone and rebuilt, the concept of realignment cannot apply to these countries' politics.

Realignment, Partisan Conflict, and Social Identity

To move toward a theoretically precise and empirically operationalizable definition of the concept, I build on Sundquist's (1983) formulation. Realignments, he argues, are "those redistributions of party support, of whatever scale or pace, that reflect a change in the structure of party conflict and hence the establishment of a new line of partisan cleavage on a different axis within the electorate" (p. 14). Rather than studying changes in the parties themselves, or in their electoral strength, Sundquist instead focuses on the object of party competition. To him, a realignment entails a change in the set of issues that drive the conflict between parties (p. 35-38). This definition adds depth to the notion, as it implies that the lasting shift of voters from one party to another reflects a more fundamental shift in what is at stake when one party prevails over the other. I thus follow Sundquist in interpreting realignment as a change in the terms of partisan conflict.

It is less certain, however, whether the terms of partisan conflict can be reduced to differing preferences over policy. Recent research has shown that voters rarely make choices on the basis of issue positions. As Lenz (2012) found, when voters realize that their position on a given issue is at odds with that of a political leader they support, they will more often shift

their position to align with the leader than reconsider their support. Achen and Bartels (2016) built on his findings to mount a fundamental critique of the mechanisms of representation in modern democracy. They argue that vote choices, rather than reflecting meaningful deliberation on policy or an evaluation of candidate quality, are largely dictated by one's social identity and group membership. These findings do not necessarily contradict Sundquist's thesis, but they call for further elaboration on it. If voters' choices are more often the product of longstanding social allegiances than of specific issue positions, understanding the nature of these allegiances and how they form becomes crucial to a full-fledged theory of realignments.

The psychological mechanisms involved in the formation of social identity were first outlined by Tajfel. His works (Tajfel 1974; Tajfel & Turner, 1979) showed that the sense of group belonging constitutes one of the driving forces of human psychology. In a variety of contexts, individuals tend to sort themselves into groups and derive their personal sense of pride from membership to their group. This finding, strikingly, holds true even when people are assigned to groups on the basis of ostensibly frivolous and arbitrary criteria. Unsurprisingly, this sense of belonging is all the stronger when it relates to a social division that exerts considerable influence over an individual's life, such as race, class or religion. Even before this mechanism was fully understood, political scientists have long been aware that these categories played a leading role in shaping political behavior. Indeed, the very first academic studies of elections in the United States, conducted by Lazarsfeld et al. (1944, 1954), concluded that social group membership was the main driver of voters' choices.

Subsequent electoral studies have provided an increasingly detailed picture of the role played by social identity in political life. The most influential was undoubtedly *The American Voter* (Campbell et al., 1960), which highlighted that political parties themselves generate a sense of shared identity among their members. This partisan identification has been repeatedly found to be the strongest predictor of voting behavior in the United States. Decades later, Green, Palmquist and Schickler (2002) observe that this finding still holds true, and extends beyond the United States to most Western countries. They connect this partisan identity to other social identities by suggesting that partisan identification emerges from a voter's perception that a given party represents the values and interests of one or more social groups with which they identify. For a voter's partisan identification to shift, then, a change needs to occur in their perception of whom the parties "stand for" – as happened in the American South when the Democratic Party embraced civil rights for African Americans. In other words, the rise of a new issue in the political debate may trigger a realignment if, and only if, it alters in a fundamental way the identity that voters ascribe to a political party. Sundquist pushes back against understanding realignment in terms of social groups, but his objection that groups are never unanimous in their electoral behavior (p. 38-41) is misguided. Descriptive group membership variables, as all variables in social sciences, may be imperfect predictors of voter behavior, but the evidence for a causal role of group *identity* remains considerable.

Realignment as Cleavage Change

Grounding realignment into a social-identity theory of voter behavior allows me to draw a connection with another influential notion in political science, originating this time from the study of European political development: namely, that of political cleavage. Although the term has a number of colloquial uses (as seen in the citation from Sundquist above), its articulation as a theoretical concept is the legacy of Seymour Martin Lipset and Stein Rokkan's landmark 1967 essay "Cleavage structures, party systems, and voter alignments." In their introduction to a comprehensive study of voting patterns across Western Europe, Lipset and Rokkan present a theory of the historical formation of party systems rooted in sociological dynamics. In their account, the emergence of structured political parties in 19th-century Europe is the product of the two "revolutions" that marked that century: the Industrial Revolution, which upended the structure of economic production, and the "National Revolution", which redefined the nature of political communities in reference to the nation. Each of these revolutions, the authors argue, sparked rifts between various segments of European societies, whose interests and values came to clash irreconcilably. The Industrial Revolution first pitted the growing manufacturing areas against the predominantly agricultural ones, then gave rise, within the industrial sector, to the much-studied class conflict between workers and employers. The National Revolution, through which the State sought to impose its primacy as the embodiment of the nation, brought State supporters in conflict with two major social forces: religious institutions and their backers on the one hand, and regions with distinctive cultures on the other.

Thus, Lipset and Rokkan argue that these four sets of social antagonisms – urban-rural, worker-owner, Church-State, and center-periphery – evolved into political cleavages, forming the basis for political conflict in European countries. The interactions between cleavages shaped the development of party systems, as each party arose to represent one or several of the clashing segments of society. Variations in the unfolding of the two "revolutions" across countries, as well as in pre-existing social structures, produced variations in the relative importance of each cleavage and in the ways in which those cleavages intersected. These differences in countries' cleavage structures, in turn, explain differences in their respective party systems. For example, the intense conflict between Church and State in France and Germany produced parties whose identities were defined by one side or the other, whereas the absence of such a conflict in Scandinavian countries produced parties defined by other cleavages. Lipset and Rokkan's argument provides a blueprint to understand how voters' social identities translate into partian loyalties: voters identify with the party which they perceive to stand on "their" side of the cleavage that is most salient to them. For example, a devoutly

Catholic worker could be drawn to either prioritize their religious identity and vote for a Christian Democratic party, or focus on their class identity and vote for a Labor party. The former choice will align the voter along either the Church-State cleavage or the worker-owner one. In short, thus, a political cleavage can be defined as *a deep-seated division of society that comes to define, or at least influence, voters' sense of political identity, and thereby their political behavior*.

Lipset and Rokkan's account of the formation of party systems, based on a long-term historical perspective, takes a linear view of political change. Cleavages, in their view, have emerged during a foundational phase of European history, and have since solidified into fixtures of each country's political life. They thus did not discuss the possibility that old cleavages, no longer relevant to a country's social structure, may die out while new cleavages, rooted in new conflicts, emerge. A theory of realignments based on social identity, however, clearly allows for such a possibility. If a realignment is a change in the contents and terms of partisan conflict, if said contents and terms are rooted in voters' social identities, and if voters' social identities in turn depend on which cleavages are most salient, this entails that "realignment" simply means a change in the relative saliency of cleavages. When an initially prominent cleavage loses its importance to voters, while concurrently an initially minor or even entirely new cleavage gains in prominence, we should see some voters' existing partisan loyalties loosen and eventually wither, to be replaced by attachments to different (and potentially new) parties. This is because, as in the example of the Catholic worker, voters might find themselves better-represented by one party along a particular cleavage, but by another party along a different cleavage. Therefore, it is possible to define realignment as a major and lasting change in the structure of political cleavages within a polity, wherein new cleavages emerge while older ones decline.

The Dynamics of Realignment

How does such a realignment, and the shift in political cleavages that underscores it, unfold? Timing and the causal mechanism have been two of the most fiercely debated issues among scholars of realignment theory. V.O. Key's original theory, as noted earlier, describes realignment as erupting within a single, "critical" election. Most early scholars of realignment adopted Key's critical-election model, to the point that the notion itself became conflated with it. This conflation played a major role in the backlash against realignment theory, as scholars pointed out that few if any elections in American history truly displayed the sort of sharp rupture that Key described (Shafer, 1991; Mayhew, 2004). This critique, however, does not do justice to the diversity of models within the realignment framework. Key himself, four years after his foundational article, acknowledged that a realignment might also occur gradually, over a long span of time. He termed this alternative form of realignment "secular", by contrast to the "critical" model formulated previously (Key 1959). Later scholars have brought greater nuance and complexity between these two extremes, with more sophisticated models of realignment. Carmines and Stimson (1989), for example, theorized a "dynamic growth" process, wherein an initial shock produces sudden shifts in electoral alignments, but also continues to effect change for several election cycles afterwards. Martin, meanwhile, conceives realignment as a distinct temporal phase, beginning with a "rupture election" that unravels the existing electoral order and ending with a "realigning election" that enshrines a new one.

All these models appear credible, and all have been fruitfully applied to explain specific occurrences of realignment in the United States or elsewhere. However, no one model accounts for all instances of the phenomenon. Rather than unfolding according to a uniform pattern, realignment appears to take many different forms that reflect the institutional, sociological and political contexts in which it takes place. Understanding the effects of these contextual factors requires careful examination of the mechanics of realignment. The rising or declining saliency of a cleavage – that is, the rising or declining importance to voters of a particular facet of their identity – might have a variety of causes, some related to long-term changes in the underlying structure of a country's society or economic organization, others to a singular event, still others to the deliberate strategy of a political party. Thus, the pacing of a realignment will first follow the pacing of the changes that are driving it. It must also be noted that cleavages on which the electorate is severely lopsided are unlikely to become politicized at all. Sundquist discusses this point (albeit expressing it in terms of issues rather than cleavages), noting that when the electorate finds itself overwhelmingly on one side, the victory of that side is a foregone conclusion, and there is therefore little impetus or opportunity to organize the sort of longstanding conflict that underscores a new partisan alignment. Thus, only cleavages that divide the electorate in relatively equal shares are conducive to a realignment.

Subsequently, as one cleavage gains saliency and another declines, institutional design is likely to mediate the pace at which this movement proceeds. Following Duverger (1972), it is widely accepted that, while not deterministic, electoral rules have a powerful impact on the structure of party systems, with proportional voting systems encouraging fragmentation into numerous parties, while more majoritarian ones tend to produce fewer, larger parties. The main reason for the latter phenomenon is strategic voting, wherein voters' best opportunity to affect election results will be to choose among the two leading candidates in a constituency even if they would ideally prefer a third one. In the context of a realignment, strategic voting is likely to induce inertia. Whereas voters in a proportional system can easily choose to express their identity according to one cleavage or another – meaning that, within the same party system, parties representing the poles of one cleavage coexist with parties representing those of another – the incentives of a majoritarian system encourage voters to continue supporting established parties even when they reflect an increasingly less relevant cleavage. Nevertheless, if the causes

underlying the realignment are not addressed, voters will eventually readjust their loyalties to reflect the new cleavage, leading to a sudden shift from one cleavage structure to another. Thus, proportional electoral rules should produce timely but gradual realignments, while majoritarian systems will delay them but render them more jarring if and when they do occur.

Other elements of institutional design may also affect the dynamics of a realignment: for example, systems allowing for the direct election of a chief executive might accelerate it, by affording individual candidates more opportunities to experiment with electoral appeals outside of their party's orthodoxy. This last point, in turn, brings to bear the role played by political parties and their leaders in this process. Politicians are not passive actors in a realignment – rather, their self-serving strategies can go a considerable way toward slowing or accelerating its course. Politicians from outside the main governing parties, or from fringes of those parties, stand to benefit from politicizing an emerging cleavage, which might allow them to gain a more central position in the political hierarchy. Conversely, as Meguid (2005) showed, established parties and their leaders have a variety of tools at their disposal to respond to these challenges, allowing them either to mitigate the unfolding realignment or to adapt to it while retaining their position within the party system. These strategies should affect not only the pace of the realignment, but which specific party (or parties) becomes the champion of each side of the new cleavage.

Operationalization

Having defined realignment and developed a theoretical framework accounting for its features and varieties, I now turn to operationalizing this concept as the key dependent variable of this study. What would it mean, in concrete terms, to observe *a major and lasting change in*

the structure of political cleavages within a polity, wherein new cleavages emerge while older ones decline? The key empirical implication inherent in this definition is that, for a realignment to occur, the pattern of "who votes with whom" should evolve. Since realignment reflects a shift in cleavages, this evolution should occur at the level of social groups. Therefore, some groups that initially displayed similar voting behaviors should drift apart over time, while conversely, groups initially thought of as diametrically opposed in their voting preferences will find themselves on the same side of more recent electoral contests. To the extent that these social groups are rooted in geographic contexts, territorial sub-units should also display the same patterns of divergence and convergence in their voting patterns.

These divergences and convergences can also be interpreted as a change in the *dimensionality* of voting patterns. A cleavage might be thought of as a dimension along which voters can be mapped based on their social identities. For example, the worker-owner cleavage will mean that voters' positions along the political spectrum will largely depend on their socioeconomic status, while the Church-State one should entail that their position is mainly driven by their level of religiosity. Thus, if I find that a sociological variable that explains voting patterns in earlier elections becomes less predictive of later ones, while one that played a marginal role in those earlier elections explains variation in recent ones better, I may infer that a realignment has indeed occurred. The stability of this pattern, however, is also crucial. If old cleavages appear to decay, but are not replaced by new ones, or if the most predictive variable changes constantly from one election to the next, this would provide evidence of a dealignment rather than a realignment. The early stages of a realignment might well be indistinguishable from those of a dealignment, as the most noticeable change at the beginning of a realignment is the decline of the existing cleavage structure (Martin 2000). However, if the politics of developed democracies are realigning, this initial decline should eventually be followed by the corresponding rise of a new structure of political attachments. Thus, if I observe a decline in

the dimension explaining earlier voting patterns with no eventual rise of a new dimension, I may conclude that a dealignment has occurred instead. Finally, if no change at all is perceptible, it must mean that voters' electoral alignment has remained stable.

Understanding Recent Political Changes

Having laid out the conceptual foundations that undergird this research project, I now turn my attention to the academic debates surrounding its subject. From as far back as the 1970s, scholars have noticed novel trends emerging in the politics of Western democracies, and over the past two decades especially, a vast field of literature has arisen to describe and explain these trends. I thus begin with a summary overview of these trends, highlighting why they can be interpreted as symptoms of an ongoing realignment. I then examine a first potential account of such a realignment, namely the influential thesis focused on changes in cultural values across developed societies. While this thesis has produced remarkable advances in research, it proves an incomplete explanation. This leads me to examine the role played by globalization. The "new wave" of globalization that began in the 1970s has profoundly upended developed societies in a multitude of areas, with major consequences for their political cleavage structures. I briefly survey these transformations, each of which gives rise to its own vast area of study. Finally, to explain how they compound to trigger a realignment, I draw from the theory laid out by Kriesi et al., which describes Western European politics as increasingly

structured by a conflict between the "winners" and "losers" from globalization. This framework proves a compelling explanation for the political changes observed across developed Western democracies.

Dealignment or Realignment?

Since the 1970s, an increasing number of researchers have drawn attention to patterns of change in the behavior of citizens in developed democracies. However, debate persists as to whether these patterns constitute a realignment and, if so, what is driving it. In the area of voting behavior, two notable trends have found compelling evidence across a wide range of countries and over the span several decades. The first is a decline in turnout, with a growing share of the eligible electorate opting to abstain from the electoral process (Gray & Caul, 2000). The second is an increase in electoral volatility, meaning that voters' choices tend to switch more frequently from one election to the next (Crewe & Denver, 1985). Scholars have connected these trends to developments outside of the electoral arena, such as the decline of partisan identification and membership. Dalton and Wattenberg (2000), in particular, take these patterns as manifestations of an ongoing "dealignment" of party systems in developed democracies. They argue that, although parties maintain a strict control over the government structure, they are increasingly absent from social life and irrelevant to their voters. Katz and Mair (1995) have taken this argument even further, arguing that partisan competition has increasingly become the façade for a "party cartel" monopolizing the State apparatus and restricting the electoral "offer".

While the evidence for these changes in political behavior is compelling, it need not be interpreted as such a paradigmatic transformation in the role of political parties and the core mechanics of representative democracy. Instead, these patterns could just as plausibly represent the early stages of a realignment. As discussed in the previous section, the passage from one electoral alignment to the next is rarely immediate. In the interval between the breakdown of the existing cleavage structure and the consolidation of the new one, a period of weak and fleeting partisan attachments is likely to occur. Some scholars have thus taken the view that contemporary dealignment trends are the symptoms of a realignment, sparking intense debates in the discipline (Dalton, Flanagan and Beck, 1984). Furthermore, in the decades since these debates first erupted, new evidence has emerged to suggest that some developed countries are moving away from this dealigned stage and toward the later phase of the realignment. The pattern is especially noticeable in the United States, where voter turnout has tended to rise over the past two decades¹ while partisan loyalties have grown more stable (Jacobson 2013). Recent studies have brought renewed attention to the stability and predictive power of partisan identity (Green, Palmquist and Schickler, 2002) across several developed democracies. Insights from these recent developments allow us to recontextualize earlier findings, bringing more credence to the thesis of a realignment.

A Cultural Backlash?

If a realignment is indeed responsible for the changes in the party systems and voting patterns of developed democracies over the past few decades, it becomes crucial to understand the nature of such a realignment, and of the new cleavages that it brings to the fore. Researchers who have taken up this task have generally provided two broad categories of explanations. In this section, I examine a first such intellectual tradition, pioneered by Ronald Inglehart and

¹ United States Elections Project. "Voter Turnout Data." http://www.electproject.org/home/voter-turnout/voter-turnout-data
centered on the idea of cultural change. In his works, most notably *The Silent Revolution* (1977) and *Culture Shift in Advanced Industrial Society* (1990), Inglehart argued that the widespread rise in living standards and educational attainment in industrialized countries since World War II had rendered earlier political conflicts over redistribution increasingly irrelevant to younger generations of voters. These voters, he claimed, re instead preoccupied with "post-materialist" issues revolving around self-fulfillment and the recognition of diversity. Political change across Western countries, in this perspective, reflected the decline of established parties defined by "materialist" concerns, and the rise of new "post-materialist" forces.

Inglehart's early work, while fruitful, suffers from a fundamental ambiguity that renders it ill-suited for the analysis of trends in voting patterns and partisan alignments. The emerging "post-materialist" politics, as Inglehart theorized it, has a specific normative content, reflecting calls for a more open society and more permissive social norms. This led him to classify values opposite to these - such as support of law and order and traditional values - and the movements that champion them as "materialistic". This, however, contradicts the definition of materialistic politics as being concerned with the distribution of economic resources. In light of these inconsistencies, Scott Flanagan (1987) proposed a reformulation of Inglehart's theory that interprets post-materialism as new *dimension* of political conflict rather than as a specific set of political values. In Flanagan's framework, both materialism and post-materialism refer to clusters of issues on which individuals and parties may take opposite stances: left or right on the former, libertarian or authoritarian/traditionalist on the latter. The trend that is reshaping Western politics, then, is not toward any specific set of values, but rather toward new objects of political dispute. Alongside the individualistic and multicultural "New Left" that Inglehart envisioned emerges a "New Right" attached to traditions, stability and uniformity. In his most recent work with Norris (2019), Inglehart embraces this revision on his original theory, and focuses extensively on the traditionalist "backlash" against value change.

Much of the recent research into political realignment follows the conceptual framework laid out by Inglehart and Flanagan, examining its sociopolitical implications. Houtman et al. (2008), for instance, use the rise of post-materialistic issues to explain the apparent decline of class voting across Western democracies. In accordance with Inglehart's observation that the highly educated are the most likely to hold culturally libertarian attitudes, they argue that differences in educational attainment constitute the sociological basis for the emerging post-materialist cleavage. Since education and income are highly correlated, this new cleavage tends to superimpose itself on the long-standing class cleavage rooted in redistributive conflicts, thus obscuring it. Kaufmann (2018), meanwhile, focuses on another potential locus for a cultural cleavage, namely racial and ethnic distinctions. Rising ethnic diversity across Western nations, he argues, has generated a backlash among the traditionally dominant White majorities. Seeing themselves as threatened by these changes, many of these White voters tend to develop a group identity and organize politically to promote their continued dominance. In the electoral realm, this leads them to increasingly support right-wing populist parties, and thereby usher in a realignment.

The theory of post-materialism and its many extensions provide a valuable lens through which to begin making sense of the changes in political behavior in Western democracies over the course of the past decades. However, they produce at best an incomplete account of these dynamics. By design, these arguments rule out any role for conflicts over economic distribution in the emerging cleavage. Such a framing is difficult to reconcile with political discourse in Western Europe and North America over the past decade, where economic grievances have played a prominent role in the wake of the 2008 recession. Trade policy, in particular, has emerged as a salient issue in the 2016 presidential campaign in the United States, and "populist" parties across the Western world make frequent appeals to economic anxieties. These factors militate for a more holistic understanding of the emerging cleavage, which recognizes its materialist components as well as its post-materialist ones. To that purpose, I now turn to examining the crucial role played by globalization, which holds the key to connecting these components.

The "Third Globalization" and its Impact

Globalization is an eminently fraught, complex and multifaceted notion, whose precise content remains the subject of countless debates. In the broadest terms, however, it can be defined as a trend toward increasing interconnection and interdependence across the world's countries. While the economic component of this process is most often the focus of attention, it affects a much wider variety of domains, including cultural attitudes, social structures, and political decision-making. It thus manifests itself as a bundle of loosely related phenomena rather than as a specific, identifiable variable. While some scholars have traced the origins of these processes to contact between Europeans and America from 1492 onward, or possibly to even earlier historical turning points, globalization's most salient features date back to the early 19th century (O'Rourke & Williamson, 2002). This first wave of globalization unfolded for almost a century, before subsiding in the wake of World War I and the economic turmoil that followed it. Since 1945, however, the internationalization of trade, culture and many other aspects of people's lives has resumed at an accelerated pace (Stearns, 2016). More recently, scholars have evoked the onset of a "third globalization", marked by changes in the structures of economic governance, the sources of international demand, the international division of labor, and the distribution of wealth (Breznitz & Zysman, 2013; Baldwin, 2016). Although debates over the periodization of globalization are far from settled, the perception of an acceleration in the last decades of the 20th and first of the 21st century is widely shared.

I argue that several components of globalization have indeed accelerated considerably in the most recent decades, with transformative consequences for developed societies. The most frequently reported measure of this accelerating pace is the expansion of international trade. Both technological advances, such as new means of transportation and the development of telecommunications, and deliberate policy efforts leading to the formation of the World Trade Organization in 1995, have considerably reduced barriers to trade. The total volume of trade as a percentage of global GDP has grown from 27% in 1970 to 56% in 2016. These numbers remain similar when only the countries of the OECD are taken into account, thus showing that developed countries are fully participant in this expansion of trade.² A key consequence of the growing role of trade in developed economies is their growing exposure to foreign competition, whether it originate from developing countries or from fellow developed ones. Following the economic arguments first laid out by Stolper and Samuelson (1941), this competition is expected to benefit the economic factors most abundant in these developed countries, while diminishing the economic output of scarce factors.

Another consequence of these economic changes brought about by globalization is the imposition of new constraints on states' efforts to manage macroeconomic cycles. In an economy heavily reliant on importation and exportation, the impact of Keynesian fiscal stimulus is likely to be greatly diminished, thus depriving states of a tool against economic downturns. The ease and rapidity of international financial transactions, whose volume has come to vastly exceed even that of trade, has correspondingly dampened the potential for monetary stimulus. Finally, the political dimension of globalization, characterized by the formation and increased delegation of authority to international organizations (whether at the global level, such as the World Bank, the World Trade Organization and the International

² World Bank, "Trade (% of GDP)", https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS

Monetary Fund, or at the regional level, such as the European Union) has also reinforced these new constraints. Many of these organizations have been designed with the explicit or implicit purpose to limit the ability of a single country to chart an autonomous course in its macroeconomic management. Most notably, they have fostered the lowering of trade barriers, demanded the delegation of monetary authority to independent central banks, and imposed limits on deficit spending and indebtedness.

Globalization has brought about equally remarkable changes outside of the economic sphere. One of the most striking changes has been the intensification of migratory flows. From 1980 to 2017, the total number of migrants increased from 102 million to 258 million, far outpacing the overall growth of the world population. The majority of these migrants have left developing countries of the "global South", seeking reprieve from situations of armed conflict or economic deprivation, and taken residence in more developed countries. As a result of this process, immigrants have come to represent an increasingly larger share of these countries' populations: over the course of the aforementioned period, the share of immigrants went from 7.1% to 15.3% in the United States, from 6% to 13.4% in the United Kingdom, and from 2% to 10% in Italy.³

The heightened contact with populations hailing from foreign backgrounds, and displaying cultural attitudes and practices sometimes at odds with those of the host country, has increasingly become a source of distrust among the native residents. As previously absent languages, religions, foods and other elements of everyday life become increasingly prevalent and visible, a commonly expressed fear is that the country's traditional identity has been undermined or transformed. Such cultural change, however, might occur even in the absence

³ Migration Policy Institute tabulation of data from the United Nations, Department of Economic and Social Affairs (2017), Trends in International Migrant Stock: Migrants by Destination and Origin (United Nations). http://www.un.org/en/development/desa/population/migration/data/estimates2/estimates17.shtml.

of major migratory inflows. Indeed, the heightened speed of communication, together with the increasingly broad spectrum of media that can be accessed anywhere in the world, increasingly makes developed countries permeable to foreign cultural influences and trends. This, in turn, entails that even the citizens who are not directly in contact with immigrants are still likely to perceive a change in their country's culture. Finally, the delegation of political power to international institutions contributes to the impression of a weakening of a country's identity by undermining its foundation in a sense of national sovereignty.

"Winners" and "Losers"

These profound changes brought about by globalization provide a credible explanation for the realignment observed in the politics of developed democracies. Since the turn of the century, political scientists have begun to take notice of this possibility and to investigate it in increasing detail. The theoretical foundation for this line of inquiry was laid by Hanspeter Kriesi and his colleagues in their ambitious cross-national study *West European Politics in the Age of Globalization* (2008). Globalization, they argue, has created a consistent set of "winners" and "losers". The gains and losses involved are of multiple kinds, encompassing both the transfers of wealth produced by globalization's economic effects, as well as the conflicting reactions to the cultural changes that it brings about. Owing to their focus on issue positions, Kriesi et al. do not examine in depth the sociological profile of these winners and losers. However, such sociological examination is the key to understanding the role played by globalization in the unfolding realignment. To account for the rise of a new cleavage, it must divide societies deeply and consistently enough to inspire the formation of new social identities, which in turn influence political attitudes and behavior. Multiple strains of research suggest that this is the case.

The economic consequences of the intensifying international competition, as discussed above, depend on the relative distribution of factors of production in the affected countries' economies: the economic returns of abundant factors should increase, while those of scarce factors should decrease (Stolper & Samuelson 1941). In Commerce and Coalitions, Rogowski (1989) derived the sociological and political implications of this economic logic. In times of expanding trade, he argues, the owners and intensive users of abundant factors see their incomes rise, emboldening them to lobby for policies that further facilitate trade. Conversely, the owners and intensive users of scarce factors, suffering economic losses, should take a defensive approach and demand protectionist measures from the state. The emerging political cleavage, therefore, is likely to pit the former against the latter. To test his theory empirically, Rogowski adopts the standard "three-factor model", distinguishing land, labor and capital as the quantities whose abundance or scarcity should be reflected in political alignments. While his analysis is successful in accounting for many instances of trade-based political conflict throughout history, his predictions regarding the future evolution of politics in developed economies do not seem to have entirely panned out. Neither the formation of a broad consensus uniting workers and capitalists in favor of trade in European countries, nor the alliance of capital and land against labor in the United States and other "New World" countries, accurately describe the evolution of political life in these countries over the most recent decades. Rather, political conflict over trade appears to have intensified in both sets of countries, and the coalitions that it produces defy easy characterization along the three-factor model.

What accounts for the new form taken by the political divide over trade? Rogowski sketches out a possible explanation by suggesting that the three-factor model might not accurately reflect the economic structure of highly developed economies. In this setting, land's economic importance tends to fade, while a new factor emerges as a key driver of economic growth. This new factor, termed "human capital" in opposition to the "physical capital"

traditionally employed for industrial production, reflects the set of skills, knowledge and dispositions that allows individuals to be more productive workers (Becker 1994). The growing importance of human capital implies a growing rift among salaried workers. On the one end, unskilled workers continue to draw their income primarily from their labor. On the other end, highly skilled ones, while still in the position of employees, are in the position to extract a return from the human capital that they possess, making their economic situation less reliant on raw labor. Combined with the continued relevance of the owners of physical capital, this rift forms a new tripartition of the economic structure.

By the logic of this argument, then, a relative abundance of human capital should be the defining feature of developed economies. Physical capital is also likely to be abundant when compared to most developing countries. Labor – that is, unskilled labor – should, by contrast, be comparatively more abundant in developing countries, where lower standards of living make it markedly cheaper. Following Rogowski's argument, then, an expansion of trade in developed countries should benefit the owners of physical capital as well as highly skilled workers, while harming low-skilled ones. Dancygier and Walter (2015) provide empirical confirmation for this conclusion, showing that low-skilled workers are systematically harmed by increased economic competition regardless of the type of industry employing them. Rodrik (2018), in a broad survey of economic research, similarly finds that recent trade agreements have resulted in severe losses for low-skilled workers. Although the aggregate benefits of trade make it theoretically possible to redistribute a fraction of the gains to offset all losses, the economic logic of globalization makes this option impracticable. Indeed, as discussed above, economic openness combined with pressure from international institutions imposes stringent constraints on the state's macroeconomic policymaking. Because the two main avenues to support the income of low-skilled workers, welfare transfers and a large public sector providing employment conditions above market rates, both require extensive use of macroeconomic tools, neither is likely to materialize. As far as the economic facets of globalization are concerned, thus, the divide between "winners" and "losers" is stark and unequivocal.

The sociological and cultural evolutions, while adding a layer of complexity to this divide, do not alter its basic structure. The complexity derives from the fact that immigrants themselves typically find employment in low-skilled positions. Nevertheless, they cannot be considered as "losers" from globalization, since their very presence in a developed country is a product of it. Given that one of the main drivers of migration to a developed country is to improve one's economic prospects, low-skilled immigrants, unlike their native counterparts, are net economic beneficiaries of globalization. However, the presence of an immigrant workforce competing for the same types of employment constitutes an additional drawback to globalization from the perspective of native low-skilled workers, compounding the impact of trade (Dancygier & Walter, 2015). Indeed, Peters (2017) argues that immigration and openness to trade have analogous economic effects to the point that one can substituted for the other.

Native workers' material grievances against increased immigration and openness to trade are likely to overlap with their resentment toward foreign cultural influence, thus linking together the materialist and post-materialist explanations for realignment. Indeed, as Houtman et al. (2008) noted, educational attainment strongly influences cultural attitudes, with higher levels of education associated with greater openness to non-traditional values and practices. To the extent that post-secondary education is one of the main sources of human capital, then, lower educational attainment should drive both cultural and economic opposition to globalization, while higher educational levels should result in higher levels of support for both aspects of it. Globalization, therefore, seems to divide "winners" and "losers" according to a consistent pattern, forming the sociological bedrock necessary for a powerful new political cleavage to emerge.

The previous section has provided a theoretical framework and preliminary empirical evidence suggesting that globalization has driven a sharp wedge into the societies of developed Western countries, one susceptible to be politicized into a cleavage. Whether this politicization has in fact occurred, and if so, how it has unfolded across these heterogeneous nations and their preexisting cleavage structures, is the subsequent question which I explore in this section. Once again, multiple strands of theory can provide the tentative elements of an answer. First, I shed light on an aspect of the divide between "winners" and "losers" that has not received sufficient attention by previous research, but that provides crucial insights into the political consequences of the ongoing realignment. This aspect is the geographic distribution of the benefits and losses generated by globalization. Based on recent works - narrow empirical studies and broader untested conjectures – I lay the groundwork for a theory of the ways in which globalization has divided the territories of developed countries, thereby reshaping their politics. Subsequently, I proceed to examine more closely the transition from the social realm to the political. Drawing from formal theory, I propose a simple framework to understand how the social divisions generated by globalization can give rise to political conflict. I then take a different approach to such conflict, showing that research in political psychology also sheds light on the effect of globalization on political identity and behavior. Together, these two sections show that the potential for a realignment driven by globalization can be derived from two radically different approaches. Finally, I examine the multiple ways in which factors specific to a given country, in particular its institutional design, play a considerable role in shaping the forms that such a realignment might take in that country.

Metropoles and Periphery

A key to understanding the socioeconomic chasm created by globalization and its political implications may lie in the geographic structure of developed societies. Recent works have begun to tap into what may prove to be a fruitful area of research. In a pair of articles, Colantone and Stanig (2018a, 2018b) sought to link regional trade patterns to electoral outcomes. Drawing from Autor et al. (2013), they used the economic dislocation caused by the rapid growth of imports from China to Western countries since the 1980s (the "China shock") as their independent variable. They first demonstrated that the geographic subdivisions with a greater prevalence of industries affected by this new import competition were the most likely to vote in favor of Brexit in the United Kingdom (2018a). Subsequently, they extended their analysis to geographic voting patterns across 15 Western European countries in the past three decades, finding similar results (2018b).

One aspect of Colantone and Stanig's findings is particularly intriguing. Examining individual-level survey data, they find that even individuals who did not work in industries directly affected by the trade shock have become more supportive of populist parties and causes if their area of residence has been harmed by the shock. The authors attribute this phenomenon to "sociotropic economic voting" of the kind outlined by Ansolabehere et al. (2014), wherein individuals use the economic conditions of their close friends and neighbors as a proxy to estimate the state of the national economy. However, an alternative explanation may be that "winners" and "losers" are differentiated not just by how they work, but also by where they live. If citizens tend to adopt political positions consonant, not just with their individual position in the face of globalization, but with the position of their local community, then geography represents a key component of the emerging cleavage. As such, it deserves to be examined in its own right, rather than as a mere reflection of individual-level dynamics. In the

chapters that follow, I will thus investigate the rift that globalization drives across the territories of developed countries and its underlying logic.

I begin this inquiry by sketching out a theoretical framework which will guide the subsequent analysis. The foundations for such a framework can be found in the arguments developed by French geographer Christophe Guilluy in a series of books aimed for the general public, most notably *La France périphérique* in 2014. Although the tone of these works is not academic, and the empirical evidence they present is limited, they nonetheless provide valuable insights into the potential mechanism at work. At the core of Guilluy's thesis lies the idea that the impact of globalization on developed societies operates through dynamics of territorial organization. A number of socio-economic processes compound to systematically favor certain parts of the country over others. Some areas are uniquely equipped to draw the benefits offered by globalization, and thus increasingly draw in its "winners", while other areas bear the brunt of its negative effects and become a refuge for the "losers".

The main beneficiaries of globalization, Guilluy claims, are large urban centers and their suburban dependencies. These areas, which he terms "metropoles", concentrate employment opportunities in the economic sectors that make intensive use of human capital, such as research, management, finance, consultancy, transport, culture and entertainment. In addition, they concentrate recent immigrants who, as discussed above, rank among the "winners" of globalization since they owe their presence to it. The multicultural ethos that develops in this context also leads the inhabitants of metropoles to view globalization in a positive light (p. 33-49). By contrast, the rest of the country's territory (including rural areas, but also exurbs and small- or mid-sized cities) is increasingly marginalized by globalization dynamics, devolving into a vast "periphery". These territories rely for their employment on low-skill, labor-intensive economic sectors that suffer heavily from international competition,

such as manufacturing. In addition, many lower-income inhabitants of metropolitan areas are driven away by rising housing prices or choose to leave out of discomfort with the prevailing multicultural norms, further exacerbating the chasm between the two territorial ensembles (p. 25-32).

Guilluy's writings thus provide substantive content to the argument that globalization's "winners" and "losers" are geographically situated, with the former finding their home in the metropoles and the latter inhabiting the periphery. In practice, however, the socioeconomic organization of a territory is often shaped by a vast number country-specific or even wholly idiosyncratic factors. Thus, in an empirical analysis, we should expect the "metropoles" and "periphery" to be separated by a gradient rather than a clear-cut boundary. Nevertheless, a few important points can be laid out in order to operationalize this argument. First, it must be noted that the "periphery" as Guilluy conceives it does not necessarily correspond to the centerperiphery cleavage theorized by Lipset and Rokkan. That cleavage reflected a cultural conflict between the center of state power and far-flung areas brought forth by nation-building efforts, rather than the differential socioeconomic impact of globalization. Neither does the metropoles-periphery divide map into the standard categories of urban and rural. Indeed, Guilluy notes that mid-sized cities, as well as the far-flung exurbs of large urban areas, are important components of the periphery. Rather, it is solely the urban core and nearby suburban rings of those large urban areas that qualify for the status of metropoles. This understanding overlaps with Florida's (2017) research, showing that, across the world, a small number of "superstar cities" have increasingly monopolized economic opportunity under what he terms "winner-take-all urbanism". Thus, the "winners" from globalization can be located within a few large urban poles, while the "losers" are found outside of those poles.

Globalization and Political Coalition-Building

Having sketched the sociological contours of the new cleavage brought forth by globalization, I now turn to examining how its growing prominence might affect the party systems of developed democracies. For globalization to trigger a realignment, it must create a social rift deep enough to affect voters' behaviors. As noted above, political identity plays a key role in this process, leading voters to "see themselves" in a certain political force on the basis of membership to relevant social group. Identity is ultimately a psychological concept; in the next section, I examine some of the works in political psychology that help explain how globalization contributes to reshaping it. Here, however, I limit myself to a formal-modeling approach, examining in an idealized setting how reasoning voters react to changing patterns in the socioeconomic structure of society, and how rational political entrepreneurs in turn respond to the incentives that these voters provide. This forms a blueprint for globalization's influence in the upheaval of political life across the developed world.

This formal blueprint was aptly articulated by Bawn in her 1999 article "Constructing 'Us'". Bawn uses game theory to demonstrate that, even in a simple society, an infinity of stable alliances between social groups can potentially form for the purpose of competing for the benefits of political power – whether they be material or symbolic. On that basis, she introduces a "Game of Ideology" wherein political entrepreneurs representing social groups with defined interests attempt to form preferential alliances with other such groups, with the goal of forming a minimum-winning coalition to control the outcomes of policymaking. Once formed, these alliances remain stable in the medium term, and lead the allies to act in ways that sometimes go against their respective self-interest, but instead advance their aggregate interests. In bargaining with other groups, the political entrepreneurs enjoy a wide latitude, but are partially constrained by "natural alliances", which occur when certain combinations of groups can extract greater benefits when allied together than they would if they chose different allies. As the extent of the benefits of a "natural alliance" increases, it becomes increasingly difficult to form a coalition that does not include the "natural allies".

Bawn's model provides a rational basis for voters to engage in political advocacy that extends beyond the defense of their immediate self-interest. By identifying with a group, they build a lasting alliance which ultimately brings greater benefits to all its members. In other words, it provides an individual-level foundation for Lipset and Rokkan's theory of political cleavages. It can further shed light on how changing socioeconomic circumstances can lead to changes in political identity. If new economic trends create "natural allies" out of groups that previously had little to gain by working together, pre-existing alliances may become unsustainable, and new ones will arise. Globalization, therefore, can create new "natural allies" out of its "winners" and "losers", respectively. Two voters who both benefit from globalization stand to gain more by adopting a common political identity than by shunning each other in favor of voters who have been harmed by it, and vice versa. Crucially, however, this process is not deterministic, and patterns of political collaboration that cut across "natural allies" can persist for a long time. Thus, a realignment need not immediately follow these changed social conditions. Rather, the changes create a *potential* for realignment, whose realization becomes increasingly likely as the chasm separating the "winners" and "losers" – that is, the strength of the "natural alliance" – widens, but always hinges on the decisions of political actors.

This potential, however, is not distributed evenly at both ends of the cleavage. As Kriesi et al. point out, because government parties have tended to favor globalization in their rhetoric and policy, the untapped source of political change is likely to be concentrated on the side of the "losers". Ambitious politicians willing to deviate from the existing patterns of political coalition building are therefore likely to find remarkable political success if they opt to appeal

to a coalition made up of native, low-skilled workers attached to the country's traditional cultural identity and living in the "periphery". It is only when these politicians make overtures to such categories, appealing to them with a combination of symbolic appeals and policy proposals, that we should observe the first signs of a realignment. In the Western European context, Kriesi et al. show that this process has typically manifested itself through the electoral success of anti-establishment parties described as "populist right" or "radical right" – although left-wing forces critical of globalization have also found success in a few instances.

The Psychology of "Winners" and "Losers"

Examining the incentives and strategies of political actors through formal modeling provides an intuitive understanding of how globalization can reshape politics in developed democracies. This understanding, while fruitful, is only one perspective on the phenomena at play. To complement this perspective, it is useful to delve into the deeper psychological drivers of voters' behavior, which are typically obscured by the standard assumption of rational self-interest. As explained above, the formation of political cleavages is rooted in the psychological phenomenon of social identity, wherein individuals form emotional attachment for and pride in social groups to which they belong. This suggests that, if a new cleavage emerges due to the effects of globalization, its "winners" and "losers" might develop identities in line with their respective standings. While one's position toward globalization is too abstract a marker to directly inspire social identification, various other groupings may function as proxies for it.

A number of recent findings in political psychology seem to fit this expectation. For example, Jardina (2019) has highlighted a rise in conscious racial identification among Whites in the United States over the past decade, a marginal phenomenon until recently. Notably, the

White Americans most susceptible to embrace their race as an identity were more likely to have lower levels of education, live in rural areas, and work in "blue-collar" occupations. They thus fit the portrait of globalization's "losers" as low-skilled native workers living in the "periphery" far from large metropoles. Qualitative sociological research by Cramer (2016) and Hochschild (2016) has produced even more specific evidence of political identity formation along those lines. Examining very different areas of the country whose main commonality is distance from major urban centers, they both find that their inhabitants display a growing a sense of shared destiny and relative deprivation. While globalization is rarely directly evoked in these studies, the divide between metropoles and periphery implicitly forms the backdrop of both.

A recent strand of research directly tackles the connection between globalization's economic impact and changes in individuals' political psychology. These studies sketch out the first substantive link between the cultural and material components of the hypothesized realignment. An important precursor is Shayo (2009), who used the framework of social identity theory to explain variations in the relative prevalence of working-class or national self-identification both across countries and over time. Individuals, Shayo argues, generally adopt identities that provide them with a sense of pride and high social status. When economic trends are unfavorable – as is the case for the "losers" from globalization – working-class identity carries particularly negative connotations. In these circumstances, working-class individuals are more likely to embrace a different facet of their identity, among which nationality is a particularly appealing option. This might help explain why the "populist" parties and politicians representing the "losers" tend to adopt a vehemently nationalist rhetoric.

Even more recently, researchers have begun providing empirical support for this argument. Examining surveys from multiple countries and years, Gidron and Hall (2017) show that non-college-educated White men's self-perceived social status has declined over the past

30 years. Furthermore, those who share this perception of lesser social prestige are more likely to support "populist" parties. Social status might thus constitute the missing psychological link connecting material and cultural "losses" incurred from globalization: the decline in low-skilled employment opportunities combined with the growing presence of foreign cultural influences combine to create the perception that the identities of native, less-educated workers are being devalued. Ballard-Rosa et al. (2018), meanwhile, propose a distinct but related psychological mechanism. Repurposing the research design put forth by Colantone and Stanig, they again examine the effect of the "China shock" on British citizens based on their area of residence, but focus on underlying attitudes rather than voting behavior. They find that the trade shock has triggered a "frustration-aggression" response among working-class voters, leading them to develop more authoritarian attitudes. These attitudes, they argue, are at the root of the appeal of populist parties.

As intriguing as these findings are, they only paint a spotty picture of the political psychology behind a globalization-driven realignment. Much more research is needed to identify the drivers leading individuals to sort themselves politically along the lines of "winners" and "losers", and how these drivers are interconnected. In particular, comparatively little attention has been paid to the "winners". While the rise of "populist" political forces has been more visible, it can be argued that this rise has engendered a backlash at the opposite end of the political cleavage, with certain political forces increasingly professing their embrace of globalization and policies associated with it. The social identities that underlie these forces remain nebulous, but might be related to the higher educational attainment of their supporters, or to their professed openness to diversity, as seen in the spread of the "woke" label in American political discourse. These are merely conjectures, however, and exploring these mechanisms in depth is beyond the scope of this research.

Cross-Country Variation

While globalization, as its name suggests, is a worldwide process, its effects on society and political life are eminently dependent on country-specific variables. These variables are potentially infinite, as each country is the product of a unique history. Nevertheless, the most consequential among them ought to be briefly discussed, as they contribute to shaping the hypotheses to be tested as well as the form that these tests will take. First, there is considerable variation in how countries experience globalization, even within the select club of developed countries. Preexisting degrees of openness to trade and immigration, often the product of complex internal dynamics, will shape the extent and manner in which globalization affects a given society. One important factor in this regard is that small countries are far more reliant on trade than their larger counterparts, as their economies are less diversified. The former, therefore, have had to adapt to the reality of globalization much earlier than the latter, which have long blunted it through the use of protectionist policies. This may have allowed these countries to develop policy solutions to alleviate the social impact of globalization, and thus limit the upheaval it has sparked (Katzenstein 1985). The relative balance of "winners" and "losers" within a society should also play a role. Where one side overwhelmingly dominates, the cleavage will play only a marginal role, as it cannot foster intense political competition.

Compounding economic variations are more strictly political ones. Most strikingly, each country will undergo the realignment brought about by globalization from a different starting point – that is, from a different preexisting party system. The initial parties are likely to reflect one or more of the four 19th-century cleavages originally identified by Lipset and Rokkan. However, as those scholars note, the relative salience (and sometimes the very presence) of a given cleavage in a given country is contingent on its specific social and political development. It can be presumed, at the very least, that the worker-owner cleavage will be

present in almost every party system in the developed world, while Church-State, urban-rural and center-periphery cleavages might have spawned new parties in some places but not in others. Whichever of the cleavages predominate at the beginning of the observed period, however, should gradually decline as the new cleavage driven by globalization rises to the forefront.

Of course, political cleavages are not the only forces shaping party systems. The most powerful such influence is unquestionably institutional design. In particular, as noted earlier, the impact of electoral rules is well-documented since Duverger (1972). Majoritarian electoral systems will therefore feature few parties (only two in the ideal-type), which may take stands on multiple cleavages and therefore leave some voters cross-pressured. More proportional systems, by contrast, will feature a wider array of political parties, which are thus more likely to specialize in representing one side of a specific cleavage. Institutional constraints, however, do not merely shape the initial party system that the globalization-driven realignment comes to upend. Rather, as previously noted, they are also likely to influence the pace at which such a realignment unfolds. In proportional settings, the emergence of "populist" parties representing the "losers" from globalization should be gradual and steady, whereas their breakthroughs in majoritarian countries should be delayed but ultimately more jarring. In these latter settings (especially in the extreme case of a perfectly bipolarized party system, such as that of the United States), the new cleavage is likely to emerge from within one or both of the dominant parties.

Institutional structure and electoral rules might affect the emergence of a new cleavage in yet another way. If, as theorized by Guilluy and Florida, such a cleavage divides the territory of developed countries into metropoles and periphery, the role of geography in a country's electoral process might have major consequences. This role varies considerably. In a country such as the Netherlands, parliamentary elections are held in a single nationwide constituency, meaning that a voter's geographic location is irrelevant to the election's outcome. In the United States, by contrast, electoral success almost always requires garnering a plurality of the votes in one or more delimited geographic constituencies. Even the Presidency, by its nature a unitary national office, is subject to an indirect electoral process which gives states a key role. This variation in the extent to which representation is tied to geography might entail a more or less fertile ground for a geographically-rooted cleavage to take hold. In countries that give geography a prominent role, such a cleavage might more immediately and starkly affect the balance of power and the policymaking process, whereas it would remain muted for a longer span of time in countries that take little account of geography in their institutional design.

Finally, established parties and leaders have a wide array of strategies at their disposal to respond to the challenges of populist forces. Meguid (2005) describes three broad attitudes than these parties can adopt: dismissive strategies, seeking to deemphasize the importance of the emerging cleavage; accommodative strategies, which coopt elements of the populist challenger in an effort to placate its electorate; and adversarial strategies, through which the establishment positions itself squarely in opposition to populist demands and attitudes. The former strategy might ward off the realignment, but puts establishment forces at greater risk of being eventually engulfed by it. Through the latter two, by contrast, the established political elite attempts to adapt to the new cleavage. There might be additional layers of complexity to the establishment's strategies when considering policy solutions. For example, Peters (2017) suggests that restrictive immigration policies combined with a loosening of trade barriers can minimize political backlash while achieving the same economic outcomes.

Hypotheses

Over the course of this chapter, I have defined and operationalized the key concept of realignment that underlies this research project, then employed this concept to explain the recent evolution of politics of developed democracies over the past four decades in relation to the rise of globalization, and finally provided elements shedding light into the mechanism through which these transformations are occurring. This wide-ranging review, drawn from a multitude of areas of political science research, constitutes the theoretical foundation that supports my research. To start building on this foundation with empirical analysis, I now turn to deriving from it a set of testable hypotheses. From the wide variety of complex topics surveyed, the number of hypotheses that could potentially arise is considerable. My analyses, however, focus on one specific facet of this multifaceted research agenda. I choose to investigate in greater depth the role played by geographic divisions in the globalization-driven realignment, building on Colantone and Stanig's (2018a, 2018b) work and seeking a large-scale empirical test of the arguments laid out by Guilluy (2014) and Florida (2017). This work, in short, should examine the role played by geography in dividing developed societies between "winners" and "losers" from globalization.

The first step in this inquiry is to ascertain whether globalization is indeed opening a chasm across the territories of developed democracies. Are metropoles, as Guilluy and Florida argue, reaping the economic and cultural benefits of globalization, while the periphery is saddled with its costs? If that is the case, the former should see a high concentration of the industries that have flourished most under globalization, while the latter should retain a higher prevalence of economic sectors threatened by foreign competition. This different employment structure should be the product of an underlying gap in human capital, with levels of

educational attainment being significantly higher in the metropoles than in the periphery. In addition, the former should concentrate immigrant populations and other groups culturally distinct from the dominant national identity, while the latter should be more ethnically homogeneous. The overall picture emerging from a socioeconomic analysis of the geography of a developed country should thus reveal a contrast between a few large, highly globalized urban poles, and a wider expanse of small and mid-sized cities, exurbs, and rural areas left out of these globalization dynamics. This leads me to formulate the first hypothesis:

(H1) Within each country under study, the largest urban centers and their close suburban rings tend to feature more employment in internationally competitive economic sectors, as well as higher levels of education and a higher share of inhabitants from immigrant background, than the rest of their respective country.

Following this argument on socioeconomic divides comes one regarding their expected political repercussions. Is globalization, by splintering developed societies into geographically separated "winners" and "losers", triggering a realignment in their party systems? To answer this question, I turn to the study of geographic voting patterns over time. As described earlier, the operationalization of a realignment takes the form of a change in the pattern of "who votes with whom". In this empirical setup, this means that geographic sub-units that initially tended to vote similarly should be seen drifting apart, while conversely, some initially different areas should converge toward similar patterns. Ultimately, these patterns are expected to paint the same broad picture as (H1), pitting the metropoles on one side of the political divide and the periphery on the other. This movement need not be complete in the most recent election under study – however, it does need to have unfolded with some consistency over time to plausibly constitute a realignment.

(H2) Within each country, over the course of the observed period, the voting patterns of the largest urban centers and their close suburban rings tend to diverge from those of the rest of their respective country.

A potential corollary to this hypothesis concerns the pace at which such a realignment unfolds. As discussed above, there are reasons to believe that institutional variations across countries, specifically regarding their electoral rules, have an impact on the ways in which old cleavages decline and new ones arise. In countries that employ proportional electoral systems, such a shift should be relatively slow and gradual, unfolding at a steady rate. Under majoritarian electoral rules, meanwhile, the dynamic of the realignment may be blunted for a time, only to manifest itself in jarring bursts. In these latter settings, geography should also play a key role, making geographically-rooted realignments more likely to disrupt the cleavage structure. Both scenarios fit the model of a consistent realignment, as these variations affect the *rate* of change in voting patterns, but not the *direction* of that change. Unfortunately, the data examined in this research is insufficient to adequately test this expectation. Therefore, I do not formalize it as a hypothesis, but limit myself to collecting preliminary evidence of its plausibility.

Finally, a full test of the argument that the globalization-driven realignment brings about a geographic cleavage requires examining voting patterns at the individual level. The first two hypotheses rely on aggregated geographic data, whose interpretation is limited. Even if I can establish that metropoles and periphery are indeed diverging in their voting behavior, it could well be that this divergence is entirely due to the individual characteristics of the people who live in those areas, such as residents of the metropoles being more highly educated. To move beyond this descriptive finding, I must replicate Colantone and Stanig's finding of a "sociotropic" voting pattern at the individual level. In other words, I need to show that, even with otherwise identical socioeconomic characteristics, the resident of a metropole will differ significantly from someone living in the periphery in their respective political attitudes and behaviors. If this finding emerges from a wide-ranging analysis of individual-level data, it will constitute a decisive test of the theory of a metropoles-periphery cleavage.

(H3) In the most recent elections, voters who live in the largest urban centers and their close suburban rings differ systematically and significantly in their political attitudes and behaviors from those who do not, even after controlling for individual socioeconomic characteristics.

Taken together, these three hypotheses set a clear agenda for the empirical analysis to come. Before such analysis can begin, however, I must first introduce the countries that will be the subjects of it, as well as the data that will serve to perform it.

Chapter II

The Lay of the Land: Cases and Data

In the previous chapter, I have put forward the key theoretical questions that arise when considering the changes observed in the political lives of developed democracies, and laid out hypotheses aimed at answering a small but important subset of these questions. Having laid this theoretical groundwork, I now turn to setting the empirical stage necessary for a test of these hypotheses. The complexity of the questions to be investigated requires analytical breadth as well as depth. On the one hand, the hypotheses as formulated apply to any country characterized by a developed post-industrial economy as well as a consolidated multi-party democracy with some degree of partisan stability. This means that their geographic span potentially ranges from North America to Western and Central Europe, as well as a few countries in East Asia. On the other hand, testing these hypotheses requires an in-depth look at data specific to each country, as well as some degree of understanding of their social, political

and geographic structure. In light of the limitations inherent in the scope of this dissertation, these competing needs for breadth and depth force a tradeoff in the selection of cases. In this chapter, I explore this tradeoff and its implications for the analyses to come, selecting the countries to be examined as well as the type of data to be collected for these analyses.

I begin with the selection of countries to be analyzed. I resolve the tradeoff between breadth and depth largely in favor of the latter, without entirely sacrificing the former. To that effect, I choose four large countries from the "core" of the developed and democratic world: France, Germany, the United States and the United Kingdom. This provides the space for fairly precise analyses that carry a reasonable expectation of external validity. To further set the stage, I proceed to briefly survey the institutions, political systems, and recent developments of each selected country, providing important contextual background for the analyses to come. This preliminary survey completed, the rest of the chapter is dedicated to introducing the data to be analyzed. The methodological cornerstone upon which this analytical agenda rests is the distinction between metropoles and periphery. However, determining what constitutes a "metropole" is a deeply fraught question which cannot entirely be answered a priori. This challenge is compounded by the extreme diversity both in each country's territorial organization and in the type of data available to describe this organization. For each country in turn, I formulate a typology of geographic areas best suited to capture the metropoles-periphery divide in light of their respective specificities. Finally, I turn to examining the variables through which I expect to measure the impact of this divide. I describe the data used to measure a variety of socioeconomic outcomes and electoral results at the geographic level in each of the four countries to be examined, and the sources through which this data was obtained. I also present the individual-level survey used to measure expressed political behaviors and attitudes in the United States. These various methodological premises, once laid out, will guide the substantive analysis to come.

The theoretical scope of this research project is considerable. Globalization, by its very nature, affects the entirety of the planet to varying extents. The specific economic, social and political changes discussed in the previous chapter are expected to apply to the entirety of the developed world – that is to say, high-income countries whose economic structure is moving away from industrial production and toward the areas of information, communication, and technological development. While this definition presents some ambiguities, a large span of countries fits this criterion, from the United States and Canada to most of the European Union, as well as some non-E.U. countries such as Switzerland and Norway, and even East Asian countries such as South Korea and Japan. Almost all of these countries are commonly rated as democracies, although some (such as Japan) are characterized by unusually infrequent political alternation, while others (mainly in Eastern Europe) display low levels of party system institutionalization. Still, even in its most restrictive definitions, a sizable share of the world is directly concerned by the changes I have hypothesized.

These changes, however, unfold in a way that is both difficult to measure directly and highly sensitive to the specificities of each country. Thus, the traditional avenue through which comparative political scientists have sought to analyze worldwide trends, the so-called "large N" analysis of simple country-level variables, is not suited for this research. Understanding whether and how globalization is dividing developed democracies necessitates looking in depth at the trends present within a country. It goes without saying, however, that findings from a single country cannot be credibly generalized to another. The opposite extreme to the "large N" analysis, the individual case study, is equally unsuited to this research project. The compromise between these two extremes is to analyze a number of countries separately with

the goal of identifying common patterns across them. The more countries display the expected findings, the more confidently I can argue that the hypothesis holds across the entirety of the developed world. Unlike "large N" studies, countries are not a source of variation in this analysis. Rather, the variation is found *within* each country, and multiple countries are studied not to increase leverage, but to enhance external validity.

An exhaustive research project could examine each highly-developed, fully democratic country in turn, thus testing the hypotheses across their entire field of application. However, such a comprehensive analysis is not practicable within the scope of this dissertation. Even examining a dozen countries could only be achieved at the cost of severe limitations on the depth and precision of the analysis, and thus on the internal validity of its findings. Instead, I choose to prioritize these criteria, sacrificing some degree of external validity as a result. I select four countries which, by their size, prominence, and variety, are broadly representative of the typical developed democracy. This relatively limited set of cases allows me to explore each country carefully and comprehensively, thus laying the groundwork for credible tests for my hypotheses. If these tests are successful, further research may extend them to a wider range of cases.

The four countries that I have selected for this analysis are France, Germany, the United Kingdom, and the United States. All are major countries, with over 50 million inhabitants, which entails a diverse economy and likely a complex cleavage structure. All four are members of the G7 and the O.E.C.D., which regroup the world's foremost economic powers. France and Germany are founding members of the European Union, while the United Kingdom was a member from 1973 to 2020. The United States largely established the institutional foundations for the global economy in the wake of World War II, and its currency remains the basis for the vast majority of international transactions. In addition, all four show evidence of the rise of

"populist" forces within their political lives. While it would be interesting to examine outlier countries whose party systems have seen little apparent change in recent decades, this initial inquiry into a potential new cleavage is better served by examining more typical cases. The countries also vary widely in their institutional design, their party systems, their political development, and their sociological and territorial organizations. As seen in the previous chapter, all these factors are expected to affect the pace and forms taken by a realignment, and thus have the potential to illustrate different facets of a common phenomenon.

To further illustrate how these differences might play out, the following subsections briefly examine the specificities of each country. I briefly survey each country's institutional structure, its party system, its recent political history, and any other key considerations crucial to understanding the country's political life. In addition to highlighting notable variations, this survey provides background knowledge that might shed an important light on the findings of the following chapters.

France

France's current institutional regime, commonly referred to as the Fifth Republic, is a product of a constitution enacted in 1958 and amended numerous times since then. Although not the first of its kind, the Fifth Republic was used as the blueprint in Duverger's (1980) theory of the semi-presidential form of government. Its distinguishing feature is a division within the executive branch between, on the one hand, a President elected independently for a term of fixed length, and on the other hand, a Prime Minister selected by the President but responsible before the lower house of parliament (the National Assembly). In practice, the dynamics of semi-presidential systems are highly variable, and the French example is atypical even within

this category of democracies (Elgie 2009). Within the French context, however, the practice of semi-presidentialism has usually tended to favor the President, who, despite exercising limited formal power, tends to dictate the government's policy agenda and rarely faces opposition in enacting it. The exceptions to this pattern are periods of "cohabitation", where the majority of the National Assembly is controlled by a party or coalition openly hostile to the President. In this case, which occurred three times between 1986 and 2002, an institutional precedent has emerged wherein the President appoints a Prime Minister in line with the legislative majority, who then exercises the role traditionally vested in the head of the executive in a parliamentary system. Such situations, however, have been rendered exceedingly unlikely by a constitutional reform which, starting in 2002, shortened the President's term from 7 to 5 years, thus aligning it with the National Assembly's term. Since then, elections to the National Assembly have been held about a month after the presidential election. Featuring low turnout rates and occurring so early into a new President's term, they have invariably returned pliable majorities, thus ensuring the continued centrality of the President in the political system.

Since 1965, France's President is elected via a majority-runoff system. If no candidate has received an absolute majority in the first round, a second round (or runoff) is then held, featuring only the two candidates who received the highest number of votes. The 577 members of the National Assembly are elected in single-member constituencies through a similar two-round system (with the exception of the 1986 election, when a proportional list system was used instead). In this case, qualification for the runoff is determined by a threshold, which makes it possible for more than two candidates to attain it. However, because this threshold is calculated as a share of registered voters, and turnout has steadily declined over the past decades (falling to 49% in the first round in 2017), most recent runoffs have only featured two candidates. While turnout in legislative elections is low as noted, Presidential elections draw by far the largest turnout of any election in the country. In 2017, 78% of registered voters turned

out for the first round, and 75% for the runoff. The gap in enthusiasm between Presidential and legislative elections is suggestive of the French public's understanding of the President as the lead player in the country's political life.

According to Duverger's (1972) claim, two-round majoritarian electoral systems of the kinds used to elect France's President and National Assembly should produce a bipolarized multi-party system – that is, a system where multiple parties play a role in political competition, but those parties organize into two lasting, competing coalitions. This description applies to certain periods of the Fifth Republic's history, but overall, the picture that emerges is somewhat more complex. The first decades following 1958 saw a party system in flux, with parties struggling to define their stance toward the new regime and its first President, Charles de Gaulle. The party founded by de Gaulle, which changed names multiple times over the course of this period, controlled either a majority or a strong plurality in the National Assembly, allowing this "Gaullist" political forces to govern with the support of smaller right-leaning parties. Opposition to these governments was initially fragmented between the French Communist Party (PCF), the Socialist Party (PS), and a number of smaller centrist parties. PCF and PS formed a tentative electoral alliance during the 1970s, but this alliance collapsed later in the decade after a series of electoral failures.

It was only in 1981 that the PS' leader, François Mitterrand, was elected to the presidency, marking the first alternation in power since the regime's inception. Martin (2000) describes the 1981-1984 period as a phase of realignment, as Mitterrand's rise to power finally achieved the kind of bipolarization Duverger had predicted. PS, now the dominant force of the left, relegated the PCF and other minor left-leaning forces to junior partners. On the other end, the Gaullist Rally for the Republic (RPR) and the non-Gaullist center-right Union for French Democracy (UDF) entered a permanent electoral coalition that would culminate in their merger

in 2002. Until 2017, the presidency and the National Assembly were continuously held by one of these two coalitions, alternating with great frequency. This bipolarization was never as absolute in the electorate as it appeared in the seats of power, however. The 1984 local elections saw the abrupt rise to prominence of the far-right National Front (FN). Its leader, Jean-Marie Le Pen, would go on to run in the 1988, 1995, 2002 and 2007, winning between 10% and 17% of the vote and even qualifying for the runoff in 2002. However, his overtly racist and antisemitic views made it impossible for the FN to forge alliances with mainstream parties and gain significant institutional representation.

This longstanding partisan equilibrium was suddenly upset over the course of the 2017 electoral cycle, providing the clearest superficial evidence for a contemporary realignment in a developed country. The presidential election held that year saw the failure of both the PS candidate and the representative of France's traditional right-wing alliance to qualify for the runoff. Both were surpassed by Marine Le Pen, who had succeeded her father at the helm of the FN in 2011 and achieved a new high for the party in 2017 with 21% of the votes. Under her leadership, the FN partially rebranded itself, abandoning the most controversial elements of its rhetoric and focusing it on a denunciation of immigration as well as an economic critique of free trade and of the policy constraints imposed by the European Union. This new positioning means that the FN now closely fits the typology of a "populist" party appealing to the losers from globalization. Le Pen's adversary for the 2017 runoff was a relative newcomer, Emmanuel Macron, who had briefly been a government minister under the incumbent PS government before launching his own political movement, En marche! Eschewing the labels of left or right, Macron branded himself as a pragmatist who would take valuable input from both sides. In practice, he articulated a liberal agenda, advocating trickle-down economics and the deregulation of the labor market while defending the E.U. and globalization. Macron won 24% in the first round, and went on to defeat Le Pen with 66% in the runoff, and his party

(rebranded as *La République en marche*, or LREM) won an absolute majority in the National Assembly the next month. Subsequent elections have confirmed that LREM and FN (renamed National Rally, RN, in 2018) are the largest political forces in national elections, while the old establishment parties remain dominant at the local level. Both Macron and Le Pen are set to run in the 2022 election, and appear well-positioned to qualify for the runoff once again.

Germany

The Federal Republic of Germany (F.R.G.) was founded in 1949, regrouping the areas under the military occupation of the United States, the United Kingdom and France following World War II. The areas occupied by the U.S.S.R. did not join this federation, instead forming the German Democratic Republic (G.D.R.) which rapidly evolved into an authoritarian oneparty state. Due to their respective geographic locations, these political entities are referred to as West and East Germany, respectively. Berlin, itself divided into separate occupation zones, retained an ambiguous position. This division persisted until 1990, when the G.D.R. collapsed alongside the rest of the Soviet bloc, resulting in the incorporation of East Germany and Berlin into the F.R.G.'s institutional structure. This process, in addition to the West's larger demographic size, means that political life in unified Germany is largely influenced by the historical development of West Germany since 1949.

As its name suggests, the F.R.G. is a federal state constituted of countries (*Länder*) which exercise a significant degree of policy autonomy. Institutionally, it is structured as a parliamentary system, with a head of government (the Chancellor) elected by and responsible to the lower house of parliament (the Bundestag). The Bundestag may vote to replace the sitting Chancellor at any time by selecting a replacement, through the procedure known as a

constructive vote of no confidence. Germany's President, elected by a Federal Convention that includes Bundestag members and representatives of the *Länder*, serves a largely ceremonial function. While they may on occasion be entrusted with political decisions – most notably, the dissolution of the Bundestag in the event of an unresolved government crisis – they typically do so on the advice of the Chancellor. The upper house of the parliament, or Bundesrat, is selected indirectly by the government of each *Land*. While it plays no role in the selection of the Chancellor, its assent is required on any legislation that impacts the *Länder*. Nevertheless, holding a majority of seats in the Bundestag is sufficient to guarantee a government control over most policy.

Elections to the Bundestag are held every 4 years (or earlier in the event of a dissolution) on the basis of a mixed-member proportional (MMP) electoral system. Under such system, 299 members are elected in single-member constituencies through a first-past-the-post electoral rule. Concurrently, voters cast a second vote for parties. These second votes are used to allocate a minimum of 299 additional members across party lists in order to ensure that the overall composition of the Bundestag is proportional to the votes received by any party passing a threshold of 5%. In other words, the list seats are awarded as compensation to parties that were underrepresented in the single-member seats. In its impact on the party system, therefore, Germany's electoral system is functionally proportional, albeit with a fairly high threshold for representation. That being the case, it is notable that for most of its history, West Germany showed little sign of the partisan fragmentation predicted by Duverger. From 1961 to 1980, only three political forces held any seats in the Bundestag: the right-wing Christian Democratic Union and its permanent Bavarian ally the Christian Social Union (CDU/CSU), the left-wing Social Democratic Party of Germany (SPD), and the small center-right Free Democratic Party (FDP). FDP's position as a small centrist party flanked by two much larger forces allowed it to play a pivotal role in West German politics, allying at times with the CDU/CSU, at times with the SPD, and thus allowing each in turn to attain the chancellorship. This dynamic was described as a "two and a half" party system.

This pattern began to change in 1983, when the Green Party entered the Bundestag for the first time. Reunification brought a new political force in the Party of Democratic Socialism (PDS), the successor to East Germany's ruling party, which later merged with dissidents from the SPD's left-wing to form the Left party. In these decades, the FDP became a reliable coalition partner for the CDU/CSU, while the SPD forged ties with the Green party. The former coalition held a majority and formed the government until 1998, when it was replaced by the latter. After the 2005 election, however, neither the CDU/CSU with the FDP nor the SDP with the Greens controlled a majority of Bundestag seats. SPD leaders ruled out an alliance with the Left given that party's controversial history, and the two major parties instead joined in a "grand coalition" headed by CDU/CSU Chancellor Angela Merkel. Since then, this grand coalition has become the norm for government formation at the federal level (a variety of coalition types have been formed across the Länder), ruling the country for 12 of the following 16 years. Both partners in the arrangement have lost support over this period – especially the SPD, which received its worst electoral result since World War II in 2017. Concurrently, a new party has emerged on the political scene, gaining prominence in a short time span. Alternative for Germany (AfD) was founded in 2013 by conservative figures critical of the governance of the Euro zone. It narrowly failed to gain representation in the Bundestag that year, receiving 4.7% of the vote. In the following years, it radicalized and focused its message on opposition to immigration, asylum policy and multiculturalism. It achieved a breakthrough in 2017, with 12.6% of the votes, and became the third party in the Bundestag. Its rapid rise potentially reflects a newfound consciousness among globalization's "losers" in Germany.
United Kingdom

The United Kingdom is almost unique among modern states in its lack of a written, official constitution. Nevertheless, a combination of quasi-constitutional legal texts, norms, and customs have consolidated into the country's trademark "Westminster system", which many democracies across the world have emulated in their institutional design. This system is founded on the principle of parliamentary supremacy, making parliament the ultimate source of all political authority in the country. Although the United Kingdom is nominally a monarchy, the monarch's political responsibilities are strictly controlled. The most important of these responsibilities is the nomination of the Prime Minister, who heads the British government (or cabinet). In practice, however, the choice of a Prime Minister reflects the will of the House of Commons, the lower house of parliament. If a single party holds a majority there, its leader is assured of being nominated, while in the absence of such a majority, party leaders negotiate the formation of a coalition. In the exercise of all other prerogatives, the monarch is bound by the "advice" of the Prime Minister. Thus, as long as a Prime Minister commands a majority in the House of Commons, their authority is virtually unchecked. Parliament features an unelected upper house, the House of Lords, but its powers are limited to delaying legislation.

Given its political prominence, elections to the House of Commons constitute the main political event in the country. They occur every five years at a minimum, but are usually more frequent owing the Prime Minister's ability to "advise" the monarch to dissolve the House at their convenience. Its 650 members (styled as Members of Parliament, or MPs) are elected in single-member constituencies using the first-past-the-post (FPP) system, which is in use since 1884. Since the 1990s, residents of Scotland, Wales and Northern Ireland also elect assemblies exercising autonomous policymaking power in these respective countries, a process known as devolution. The House of Commons may also call on voters to express their views on a specific issue via referendum, but is not formally bound to respect its outcome. Overall, the country's political life still revolves around elections to the House of Commons. Given its unmitigatedly majoritarian electoral rules, it is not surprising that U.K. politics have tended toward a two-party system. Since the 1930s, two parties, the right-wing Conservative Party and the left-wing Labour Party, have held the overwhelming majority of seats in the House.

This bipolarization, however, has not been as absolute as Duverger's theory would suggest. Throughout the past century, but especially since the 1970s, smaller parties have held on to a small but non-negligible share of the seats, allowing them to occasionally play a role in the formation of government. The most prominent of these parties are the Liberal Democrats (LibDems), founded in 1988 from the merger of the longstanding Liberal Party and a moderate faction of the Labour Party. Despite their national profile, the LibDems succeeded in electing 50 to 60 MPs for several election cycles and, following the inconclusive 2010 election, entered government as a junior partner in coalition with the Conservative Party. Since then, they have suffered heavy losses, and their representation has been limited to about a dozen MPs. Other parties with notable representation in the House have been based in a specific area of the United Kingdom, taking advantage of their regional concentration to gain seats despite the unfavorable electoral system. The most prominent of these is the Scottish National Party, which was founded in 1934 but first elected an MP in 1970. Throughout the following decades, the SNP's MP contingent remained small but sometimes played a key role, such as in supporting a Labour government from 1974 to 1979. Its prominence grew following devolution, as it gained control of the autonomous Scottish government in 2007, then went on to win 56 of Scotland's 59 seats in the 2015 House election. Since then, it has been the dominant party in Scotland, essentially establishing a separate party system in the area. The Welsh party Plaid Cymru has not seen a comparable success, only winning between 2 and 4 MPs since 1974. In addition, all of Northern Ireland's MPs represent local parties, reflecting divides unique to this region.

The United Kingdom has seen the rise of "populist" political forces over recent decades, although these forces have failed to build any significant presence in the House. Various parties competing in elections since the 1990s have espoused anti-globalization messages, such as the Referendum Party or the British National Party. Starting in the 2000s, the anti-immigration and anti-E.U. United Kingdom Independence Party (UKIP) gained traction, reaching a high in 2015 with 12.6% of the vote. The impact of this breakthrough was negated by the majoritarian voting system, as only one UKIP MP was elected to the House. Still, the party's newfound visibility had a profound influence on political discourse in the U.K. The Conservative Party, which had long included a euro-skeptic wing, embraced the proposal of holding a referendum regarding the country's continued membership in the E.U. Following the Conservative victory in 2015, the referendum was held the next year. Despite the fact that leadership of both major parties officially supported the choice to remain, 52% of the voters chose to leave. The motivations of these voters remain a matter of debate, with commentators highlighting such considerations as economic and cultural anxieties over the growing presence of Eastern European immigrants, a desire to recover national sovereignty, or frustrations over the U.K.'s financial contributions to the E.U.'s budget. Regardless of which proved decisive, all these drivers fit the narrative of an underlying opposition to the dynamics of globalization. Following this result, the Conservative Party has decisively embraced the cause of "Brexit", and current Prime Minister Boris Johnson successfully negotiated a withdrawal agreement with E.U. leaders in 2020.

United States

The United States' constitution, in operation since 1789, is one of the oldest still in use to this day. This longevity has made it highly influential across the world, similarly to its British counterpart. Its institutional design, however, differs radically from that of the Westminster system. Where the U.K. tends to concentrate power in the House of Commons, the U.S. disperses it across a multitude of institutions. Its federal nature means that national institutions (termed collectively as the "federal government") must contend with sub-national entities (States) with constitutionally guaranteed policy autonomy. In addition, the federal government is structured as a presidential system, meaning that the chief executive is a President elected separately from the legislative branch (Congress) for a fixed term of four years. Congress itself is split in two houses, the House of Representatives and the Senate, both of which must agree in order to pass legislation. Finally, the United States is home to one of the most aggressive and longstanding tradition of judicial review, meaning that the actions of the legislative and executive branches face extensive scrutiny from the judiciary. All of these features make the policymaking process more challenging and radical changes to the status quo unlikely.

In designing electoral systems, however, the United States tends to follow a majoritarian logic. Although some states have opted for alternatives in a few cases, the vast majority elect their Senators, Representatives, and state-level officeholders through a singlemember first-past-the-post method. The President, meanwhile, is elected through a baroque tiered process known as the Electoral College, wherein the voters of each state choose a party list of "electors" who then go on to elect the President. The system through which these electors are chosen is in essence a multi-member extension of the first-past-the-post system, wherein the list receiving the most votes wins all available seats in the state. As such, this system is typically described as "winner-takes-all". Given the majoritarian nature of these voting systems, U.S. politics have been dominated by two political parties, the Democratic Party and the Republican Party, both of which trace their origins to the 19th century. This two-party system is far more pronounced than in the United Kingdom, as virtually every officeholder at every institutional level is either a Democrat or a Republican. Thus, the United States is one of the few countries that strictly fulfills Duverger's prediction for majoritarian systems. This limited inter-party competition, however, is balanced by a high degree of competition *within* each party. First appearing in the early 20th century, and widespread since the 1970s, primary elections have been used to select either party's candidates for political office. Since anyone can declare themselves a member of a party while registering to votes (and many states' primaries are also open to nonmembers), this means that large swathes of the electorate have a direct input in candidate selection. This process limits the ability of party leaders to enforce a common platform, leading to significant heterogeneity within each party.

As such, while the two major parties have remained the same for over a century and a half, their policy positions and the coalitions that compose their electorates have changed dramatically over this period. These shifts within the parties became a focus in the development of the concept of realignment, as scholars identified specific moments of intense change (Burnham 1970, Sundquist 1983). Since the presidency of Franklin D. Roosevelt (1933-1945), the Democratic party has emerged as an advocate of redistribution and Keynesian fiscal policy, while the Republican party has adopted more free-market stances. In other respects, however, these parties have continued to undergo major transformations since World War II. A turning point came in the 1960s, when national Democratic leaders, having acquired an electoral base of working-class African-American voters in Northern states, aligned themselves with the Civil Rights movement to dismantle the regime of discrimination and disenfranchisement of African-Americans in force across most of the South. This move alienated the majority of Southern White voters, historically a core Democratic constituency, leading to the region drifting toward the Republican Party over the following decades (Carmines & Stimson 1989). Partially as a product of this Southern shift, American parties have also grown internally homogeneous and further apart from each other in their policy positions since the late 1970s, a trend typically described as polarization (Jacobson 2013). This polarization process has been particularly pronounced among elected officials, but is also present in the electorate.

In this broader context, the 2016 presidential election constitutes both a culmination of prior trends and a novel development. Both parties' primaries saw major populist challenges to the political elite's consensus on globalization. In the Democratic Party, left-wing insurgent candidate Bernie Sanders was ultimately defeated by Hillary Clinton, an establishment leader generally favorable to immigration and free trade. Republican voters, instead, handed their nomination to businessman Donald Trump. Lacking any prior political experience, Trump oriented his campaign on a vitriolic denunciation of immigration and trade agreements such as NAFTA. This message split both the Republican party and the wider electorate based on attitudes toward immigrants and a sense of white self-identity, which had not previously been salient in U.S. politics (Sides et al., 2019). In the general election, Trump won fewer popular votes than Clinton, but prevailed in the Electoral College, becoming the 45th President of the United States. His presidency saw near-constant controversy, driven by his policies as well as his personal behavior, but retained the staunch support of large swathes of the electorate. He was narrowly defeated in 2020, but remains a leading figure within his party.

Charting Metropoles and Periphery

Having selected the four countries that will serve as testing grounds for my hypotheses, I now turn to building the empirical tools that I will employ to test them. In other words, I seek to operationalize the abstract concepts laid out in these hypotheses into concrete, measurable variables. The most important of these concepts is the divide between metropoles and periphery, theorized by Guilluy and implicit in Florida's analysis. Both authors argue that a growing social and economic chasm separates the largest urban agglomerations of each country from the parts of the country that fall outside these areas. With (**H1**), I hypothesize that this socioeconomic divergence reflects a concentration of "winners" from globalization in these large urban areas, while its "losers" are prevalently found outside of them, in what Guilluy describes as the "peripheral" part of the country. With (**H2**), I further claim that this differential geographic impact of globalization is triggering a political realignment, as metropoles and the periphery increasingly come to diverge in their voting behavior. To test both hypotheses, it is necessary to chart, both literally and figuratively, the geographic division between metropoles and periphery. Which parts of each country's territory are encompassed into a metropole, and which are left out of any?

Unfortunately, this question finds no simple answer. Operationalizing the metropolesperiphery divide proves a complex task that leaves considerable room for ambiguity. Multiple types of challenges arise at every level of the process. First, it is necessary to define and delimit what constitutes an urban area. In developed countries, urban density tends to form a gradient, with an extremely dense urban core surrounded by a succession of inner to outer suburban rings of decreasing density, eventually transitioning into semi-rural "exurbs" and then fully rural areas. Given these fluid and abstract categories, it is rarely clear when a metropole ends and the periphery begins. Guilluy suggests that the dividing line cuts through the suburbs, with inner suburbs being settled by workers integrated in the metropolitan economy while outer ones are the refuge of people driven out by rising housing prices. However, this observation is of limited empirical utility. In practice, delimiting the extent of an urban area is the task of statistical and demographic agencies specific to each country. These delimitations are typically grounded in measures of geographic contiguity and housing density, with commuting patterns sometimes providing an additional criterion. However, the specific measures of these concepts vary widely, making direct comparisons across countries impossible. Compounding this issue, the geographic units used to collect socioeconomic or electoral data do not always overlap with the boundaries of these urban areas, meaning that this data can only imperfectly be mapped onto a mapping of metropoles and periphery. A further question arises in determining which urban areas are large enough to qualify as metropoles. Guilluy includes in this category France's 25 largest urban areas, but even if this definition were to be taken at face value, there is no reason to expect that it would hold true in other countries with a different territorial and economic development.

All of these methodological challenges make a straightforward, *a priori* delimitation of metropoles and periphery impossible. Although I follow the general principle of identifying the most populous areas of contiguous dense habitation, I do not seek a strict, uniform standard to impose on the four countries to be analyzed. Rather, I examine each country's geography based on the available data, and use it to construct a more nuanced typology of areas. These typologies will thus vary from country to country, reflecting the different realities on the ground as well as the limitations of the available data. As a result, the findings in each country will not be directly comparable to those of another. Testing (**H1**) and (**H2**) will require showing that larger urban areas differ systematically in their socioeconomic profile and their electoral results from smaller cities and rural areas. Beyond this broad pattern, my study will take on a more inductive approach, using the findings of the analysis to gain a better sense of which parts of each country display a metropolitan or a peripheral profile. To lay the groundwork for this analysis, the following subsections detail my approach in developing a geographic typology for each country to be analyzed.

France

French data on urban areas provides a unique combination of precision, granularity, and compatibility with other geographically-coded datasets, providing the material for an especially detailed typology. In examining France's territory, I exclude the "Overseas Departments and Collectivities", areas distant from the European mainland whose socioeconomic and electoral patterns are highly idiosyncratic. The remaining 34,841 municipalities (communes) that cover France's European territory are classified by the National Institute of Statistics and Economic Studies (INSEE) into 9 categories. These categories distinguish the strictly urban "poles" by their size (large, medium or small), as well as the suburban rings (couronnes) of these poles. It also includes municipalities which are deemed "multipolar" (that is, connected to the fringes of multiple urban areas), and those that lie outside of the sphere of any urban area, and are thus wholly rural. This typology forms a solid basis to begin operationalizing the metropoles-periphery divide. However, the category of "large poles" remains too broad, encompassing a full 59% of France's 2016 population. As such, I split this group into four categories: the Paris urban unit (by far the largest in the country), other urban cores with over 400,000 inhabitants, those with 150,000 to 400,000, and finally "large poles" with less than 150,000 inhabitants. I also divide the category of rings of the large poles along corresponding lines. In turn for the sake of simplicity, I collapse medium and small poles into a single category, and do the same thing with the rings and multipolar municipalities associated with those poles. This yields a total of 12 categories: 5 types of urban poles of varying sizes, their respective rings, multipolar areas at the fringe of large poles, and rural areas. Figures 2.1 and 2.2 below display this detailed typology, respectively showing a breakdown of France's 2016 population based on those categories and a map showing their location across France's European territory.





Germany

Official German statistical sources do not offer a readily operationalizable measure of the extent of urban areas. The closest to a formal list of German metropoles comes from the Initiative Group European Metropolitan Regions in Germany (IKM). However, their definition of "metropolitan regions" tends to be overly broad. The eleven regions that they identify cover the majority of the country's land area, thus being poorly suited for the purpose of identifying a territorial divide. To take a more precise approach, I draw from *citypopulation.de*, which uses official German population data in order to map the country's "urban agglomerations". Their method produces extremely fine-grained delimitations, which unfortunately cannot be linked to other available demographic or electoral data. As such, I overlay *citypopulation.de*'s areas on a map of Germany's 401 administrative districts (*Kreise*). I then categorize these areas by their population size to form an operational typology. The two most populous areas emerging from this process are the Ruhr (*Ruhrgebiet*) and the Cologne-Düsseldorf area, two contiguous regions covering a dense network of cities with a shared history as the heartland of Germany's industrial revolution. I group these two into a single "Rhine-Ruhr" category. I then group the

next five largest urban areas, totaling between 2 and 5 million inhabitants. I create three more categories, grouping areas between 1 and 2 million, between 500,000 and 1 million, and between 200,000 and 500,000. German territory outside of these areas forms a final category. I display this typology in figures 2.3 besides and 2.4 below.





United Kingdom

The United Kingdom's 2011 census measured urbanization through the concept of a "built-up area", representing a contiguous built-up settlement of a certain size. These areas are similar in size and structure to Germany's "urban agglomeration", with precisely defined boundaries. As with Germany, however, these units are not tied to demographic or electoral data, and as such cannot be used directly. I thus use them as a baseline to overlay on a map of House of Commons constituencies, and assign each constituency to the area that encompasses most of its territory. Because the constituencies used to elect the House of Commons were redrawn in 2010, I enact this process twice, first for the map used from 1997 to 2005 and then for the one in use since 2010. I exclude Scotland and Northern Ireland from this analysis, since, as discussed in the previous section, they have developed separate party systems. London emerges by far as the largest built-up area, with nearly 10 million inhabitants. As such, like

Paris and the Rhine-Ruhr area, it forms its own category. In addition, London is unique among British cities for its strong influence on the regions around it. I attempt to capture this effect using Duncan A. Smith's design of London's "functional urban region", thus building a separate category of constituencies forming a "ring" around London. Furthermore, I distinguish three additional categories for "built-up areas" in England and Wales: first, areas encompassing

between 1 and 3 million inhabitants, then those between 400,000 and a million, and finally those between 200,000 and 400,000 inhabitants. Once again, these categories, along with the remainder category of constituencies falling outside those areas, are displayed below in figure 2.5 besides, and figures 2.6 and 2.7 below.

Figure 2.6: Map of House of Commons constituencies in England and Wales (1997-2005) by Area Type





Figure 2.7: Map of House of Commons constituencies in England and Wales (2010-2019) by Area Type



United States

The main units used by the United States Census Bureau to measure urban patterns are Metropolitan Statistical Areas (MSAs). These areas are built from counties or equivalents (the main administrative division within a state), which presents both advantages and flaws. The main flaw of this approach is that many counties are large in both area and population, and as a result MSAs tend to extend beyond a strictly defined urban core into more suburban or even exurban areas. However, this broad definition could only bias the analysis toward finding lesser differences between metropoles and periphery. In addition, the vastness of U.S. territory means that a significant share of its population still falls outside such areas. The advantage of using counties as a base unit, meanwhile, is that a vast array of sociological, demographic, economic and electoral data is available for these units. Therefore, I use these MSAs to build a typology of the United States' territory, including the 50 states and the District of Columbia. Unlike the previously examined European countries, the United States does not have a single urban area that stands out starkly by its size. Instead, based on the 2010 census, 9 MSAs had a population of 5 million inhabitants or higher, forming the first category. I then group the MSAs with a population between 2 and 5 million inhabitants, and those between 1 and 2 million. Finally, I

form a category for all other MSAs, whose minimum population is 50,000, and one for counties that do not fall into any MSA. Figure 2.7 besides represents the overall population breakdown of these categories based on the 2010 census, and Figure 2.8 below shows their distribution across the United States' territory.





The Dependent Variables

Having introduced the countries to be examined and divided their territories in such a way as to capture the metropoles-periphery divide, it is now time to introduce the data with which I seek to measure this divide. If the largest urban areas in a country are found to differ significantly and consistently from the rest of that country in these measurements, this will constitute evidence for such a divide. In this section, I present the sources used to gather this data, as well as its most salient features. Tests for the different hypotheses laid out in the

previous chapter require fundamentally different types of data. As such, rather than dividing this section by country, I organize it so as to reflect these varying categories of data. First, I discuss the sociological, demographic and economic data used to test (**H1**). Then, I examine the sources used to collect the election returns necessary to test (**H2**). Finally, I present a specific survey, conducted in the United States, which provides a unique opportunity for a test of (**H3**).

Demographic and Economic Data

Showing that globalization has driven a wedge between metropoles and periphery, with its "winners" concentrating in the former while its "losers" find refuge in the latter, requires examining a wide variety of social, economic and demographic indicators. As discussed in the previous chapter and examined in detail in the following one, globalization's "winners" and "losers" are expected to differ along a wide range of dimensions, including their level of educational attainment, their position in the labor force, and their national, cultural or ethnic backgrounds. Unlike the political realignment, which is inherently dynamic, this socioeconomic divergence can be examined statically by its overall outcome on the relevant countries. Indeed, the overall trend toward greater economic, social and political globalization in developed countries is well documented. Even if metropoles and periphery were just as divergent in their socioeconomic profiles in 1970 as they are today, it is the globalization trend which has imbued this divergence with meaning and, ultimately, political saliency. As such, I focus on relatively recent data, collected over the previous decade. This allows me to sketch the most directly relevant picture of the metropoles-periphery divide as it currently exists in each country.

To collect this data, I turn to the official statistical data compiled by the relevant offices within each country's government. In some cases, these figures have been formatted and made accessible by private services, although they originate from public sources. Starting with France, I use the figures collected by the data-visualization platform geoclip.fr, which showcases a wide range of demographic variables originally collected by the INSEE at the level of French municipalities. While France does not conduct a full census of its population, it uses partial annual surveys to continually update its demographic estimates. I use indicators produced by the INSEE for 2014, 2015 or 2016, depending on the specific variable. Both Germany and the United Kingdom, meanwhile, conducted their most recent population censuses in 2011. Germany's census data is directly available online, with its own website curated by the Statistical Offices of the Federal and State Governments. I analyze the variables of interest at the level of administrative districts. For British census data, I rely on the British General Election Constituency Results dataset compiled by Pippa Norris, which includes recent election results as well as a number of census indicators at the level of parliamentary constituencies. Finally, for the United States, I draw from a number of official sources made available by the data visualization website *socialexplorer.com*. The most prominent of these sources are the official decennial census, which includes basic demographic indicators, and the five-year series of the American Community Surveys (ACS), also conducted by the U.S. Census Bureau, which provide data on a broader set of topics. I use data from the 2010 census, and two different editions of the five-year ACS (2005-2009 and 2015-2019). I also briefly draw from the U.S. Census Bureau's 2014 County Business Patterns data and the Federal Housing Finance Agency's 2020 Housing Price Index data.

Election Results

After examining the socioeconomic component of the metropoles-periphery divide, I then turn to its political ramifications. To test hypothesis (**H2**), it is necessary to collect and analyze geographically disaggregated election returns for each country in the analysis. For these hypotheses, capturing a temporal dynamic is crucial, as the purpose is to ascertain whether a realignment rooted in the metropoles-periphery divide has reshaped voting patterns in these countries. This analysis therefore requires comparing electoral results over a number of electoral cycles. Theoretically, such an analysis could span as much as five decades, reaching back to the 1970s. However, a number of practical considerations ranging from data availability to confounding intervening changes force me to limit the lower temporal limit to the early 1990s. Still, the temporal range and the number of electoral cycles analyzed in each country is enough to distinguish meaningful trends from temporary swings. I select one particular type of election for each country, focusing on the election that draws the most national attention and is as such most representative of voters' long-term political allegiances.

In France, *geoclip,fr* provides detailed election returns starting in the 1990s, aggregated at multiple geographic levels including that of municipalities. These returns originate from the Interior Ministry, which is tasked with administering French elections. I analyze presidential elections, which, as discussed above, constitute the main political event of the country and draw a much higher turnout than any other type of election. Presidential elections also have the advantage of featuring the same candidates on the ballot everywhere in the country, thus limiting the potential for noise in the results due to the peculiarity of local candidates. The available data includes results for five presidential elections, spanning from 1995 to 2017. I primarily focus my analysis on the first round of each election, but also examine voting patterns in the second round.

Germany's Federal Returning Officer provides detailed datasets of Bundestag election results aggregated at a variety of geographic levels, ranging from the *Länder* all the way down to municipalities. As with the socioeconomic analysis above, I focus on the intermediate level of administrative districts (*Kreise*). Datasets are available for every Bundestag election since 1980. However, reunification with East Germany in 1990 makes comparisons with prior elections impracticable. As such, I only analyze the elections between 1994 and 2017, a total of 7 electoral cycles.

The election data I use for the United Kingdom partially draws from the aforementioned *British General Election Constituency Results* dataset provided by Pippa Norris. This dataset includes constituency-level results of elections to the House of Commons from 2010 to 2019, in addition to estimates for the results of the 2016 referendum on leaving the E.U. Since its temporal span is fairly short, I supplement it with data from the House of Commons Library for the elections of 1997, 2001 and 2005. As noted in the previous section, these elections were held using a different constituency map, which means that their results can only be imperfectly matched to later ones. This brings the total number of House elections examined to 7, in addition to the EU referendum.

Finally, for the United States, I use data provided by the website *uselectionatlas.org*, which compiles electoral returns from official state-level sources. As with France, I focus my analysis on presidential elections, which present the same advantages in terms of their high profile and uniformity of candidates. Results are available at the county or county-equivalent levels since at least 1960. However, for the sake of maintaining a consistent time span with the other countries, and to avoid potential confounders related to the impact of the Civil Rights movement, I choose 1992 as the starting point of my analysis. From that year's election to the most recent one in 2020, the analysis will therefore span 8 electoral cycles in total.

Individual Survey Data from the United States

To fully ascertain whether the metropoles-periphery divide is triggering a realignment in the politics of developed countries, geographic evidence alone cannot suffice. The crucial final step of my analysis, reflected in (H3), consists in examining whether this divide has a direct effect on individuals' voting behavior, independent of other socioeconomic indicators that may drive said behavior. Testing this hypothesis requires examining individual-level survey data, wherein these indicators can be controlled for in the framework of a multivariate regression analysis. However, individual-level surveys with the scope and precision required to accurately locate respondents in the metropoles-periphery divide are quite rare. As such, the only dataset suited for the purposes of this analysis comes from the United States. The Democracy Fund Voter Study Group's Nationscape survey, conducted in 2019 and 2020, interviewed over 300,000 respondents, selected in such a way as to be representative of the country's geographic diversity. Respondents are identified by their congressional district of residence, allowing imperfect but acceptable matching with the territory covered by the largest MSAs. Conducted during a particularly intense period of U.S. politics, this survey includes a variety of items capturing voting intentions and political attitudes on a wide range of salient issues. It also includes indicators of a respondent's socioeconomic and demographic profile, thus providing control variables which facilitate isolating the effect of geography. I therefore use this data to build a regression model testing whether the metropoles-periphery divide directly affects voting patterns.

Chapter III

Metropoles and Periphery under Globalization

The crucial first step in understanding how globalization may have reshaped the politics of developed democracies is to examine its effects on the socioeconomic structure of their territories. In this chapter, I undertake this examination, using the analytic lens of the divide between metropoles and periphery. Authors such as Guilluy and Florida have highlighted the diverging fates of large urban poles and outlying areas under the economic pressures and sociocultural influences of globalization. I seek to confirm these findings and qualify them more precisely, using a variety of data from the four countries under study. Since the nature, sources, and time and methods of collection of this data vary from country to country, direct comparisons can rarely be drawn. Nevertheless, the partition of the countries' territories along the typologies of metropoles and periphery created in the preceding chapter makes it possible to identify clear patterns. The presence or absence of such patterns will test the validity of hypothesis (**H1**), stating that within each country under study, the largest urban centers and their close suburban rings tend to feature more employment in internationally competitive economic sectors, as well as higher levels of education and a higher share of inhabitants from immigrant background, than the rest of their respective country.

I begin the analysis by examining the variations in patterns of educational attainment across each country's territory. As seen in Chapter I, education constitutes the starkest fault line between the winners from globalization and its losers, with individuals attaining higher degrees being best equipped to reap its benefits. If, as Guilluy and Florida suggest, metropoles act as hubs for the economic opportunities fostered by globalization, we should expect these highly-educated individuals to congregate there. I find substantial evidence for this dynamic in all four countries. Variations in education, in turn, can be expected to correlate with variations in the structure of the labor force. Formal education is one of the main sources of human capital, which allows workers to gain employment in positions favored by globalization. Therefore, we should expect industries and occupations that thrive under globalization to be overrepresented in the metropoles, whereas the periphery should concentrate those that suffer most from foreign competition. This expectation is generally confirmed, albeit with notable exceptions. In a third section, I turn to the main sociocultural component of the divide created by globalization, namely foreign cultural influence in the form of immigration and ethnic diversity. Large urban centers are expected to see a high concentration, not only of recent immigrants, but also of the descendants of older ones, as well as of other groups marginalized by the dominant national culture. For the three countries that provide data regarding foreign background and ethnicity, this is indeed what I find. Having examined these three major components of globalization, I dedicate a final section to analyzing a few additional indicators. Often available for only one country, these variables provide findings that are difficult to generalize, but nevertheless contribute to sketch a clear picture of the divide between metropoles and periphery.

Educational gaps arguably constitute the primary driver of the realignment unfolding in the politics of Western democracies. As such, they have received a considerable amount of attention from theories of "cultural backlash" and more materialistic explanations alike. For scholars such as Inglehart, who argue that the emerging cleavage centers on diverging attitudes toward cultural change, education tends to foster greater openness and reduce adhesion to traditional values. From the perspective of arguments focusing on the impact of economic divides, education endows workers with human capital that allows them to take advantage of labor market trends. Globalization, as a driver of both cultural and economic changes, thus seems to systematically favor the most highly-educated categories, often at the expense of lesseducated ones. If, as Guilluy and Florida have argued, the economic opportunities and cultural diversity fostered by globalization tend to concentrate in a country's largest urban cores, these metropoles should attract a disproportionate share of adults with higher degrees of educational achievement. To inquire if that is the case, I examine data on educational attainment from the four countries under study, breaking it down based on the geographic typologies laid out in the previous chapter. Despite variations in territorial organization and in the structure of formal education, consistent patterns emerge from this analysis, with university graduates in particular being overrepresented in the largest metropoles of each country. These findings are particularly stark in France and the United States, while the patterns in Germany and the United Kingdom present some complexities.

France

To examine the geographic patterns of educational attainment in France, I use data provided by the INSEE for adults in 2015. This data distinguishes four levels of educational attainment. At the bottom are individuals who have not received a terminal degree from the secondary education system. This includes people lacking any formal degree, as well as holders of an elementary school certificate (CEP), which was awarded until 1989, or a middle school degree (BEPC). Nationally, 30% of adults fall in this group. The next category features holders of two types of secondary-level degree with a vocational purpose, CAP and BEP, making up another 24%. Then come holders of the standard terminal degree of secondary education, known as the *Baccalauréat*, comprising 16% of adults. The fourth and final category, totaling 30% of adults, includes all recipients of a university degree (ranging from 3 years of study for a *License* to 8 or more for a *Doctorate*), as well as other specialized post-secondary diplomas.

How do these proportions vary across different geographic settings? Figure 3.1 below breaks down educational attainment in France across the detailed typology of urban cores and suburban rings constructed in the previous chapter, revealing stark contrasts. University graduates are especially overrepresented in the Paris urban unit, reaching 43% of the adult population, and still make up a notable 36% of it in other urban centers with more than 400,000 inhabitants. Elsewhere, the share of university graduates drops rapidly, falling under 20% in rural areas as well as medium or small urban areas and their suburbs. The share of adults without a secondary schooling degree follows the inverse pattern – it is under 30% in urban areas over 150,000 inhabitants and their suburbs, and reaches 38% in rural areas and as well as in medium and small poles. Individuals with vocational degrees compound this pattern, ranging from just 15% in the Paris urban unit and 20% in other large units to about 30% outside of large urban areas and their rings.



Overall, a clear pattern emerges, wherein urban poles over 400,000 inhabitants, largely overlapping with the metropoles identified by Guilluy, see a high concentration of university graduates. Their suburban rings and other large urban poles form a transitional zone, while the rest of the country is settled by people with lower education levels. French educational patterns thus display strong evidence of a metropoles-periphery divide.

Germany

German education data, drawn from the 2011 census, classifies individuals over the age of 15 according to the highest level of schooling they have attained. This categorization is more detailed than in the French data, but it presents the limitation of not encompassing university degrees. The highest qualification represented is the A-level degree, which grants admission to a university. The absence of distinction between university admittees and graduates proves to be less limiting than expected however, as only 20% of Germans over 15 appear to have reached the A-level. The process of reaching this qualification appears to be considerably more selective in Germany than it is in the other countries examined in this study, making the individuals who achieve it well-positioned to benefit from globalization. Below A-levels are the recipients of technical certificates, which are also awarded following completion of high school and allow entrance to a technical college (*Fachhochschule*). About 8% of the over-15 population falls in this category. An additional 2% have completed some high school, but received no A-level or technical certificate. We then find nearly 27% of this population who have completed *Realschule*, corresponding to about ten years of schooling. The final major block comprises the nearly 36% of people who have completed a *Volksschule* or *Hauptschule*, corresponding to 7 or 8 years of schooling. Finally, about 5% have exited the education system with no degree, and 2% are still in school. This breakdown reveals a strikingly different educational structure compared to France's.

How does this breakdown vary along the metropoles-periphery divide? Figure 3.2 below displays the educational profile of various types of geographic areas in Germany. The largest urban area, the Rhine-Ruhr region, stands out with surprising patterns. Its share of A-level graduates is only slightly above average at 22%, while its share of individuals over 15 who have only attained a lower secondary degree or none at all is strikingly high, at 43%. The Ruhr's surprisingly un-metropolitan educational profile might be explained by the Ruhr's history as a center of German industrialization, and its subsequent struggles with deindustrialization. Still, such an egregious exception to the metropoles-periphery model with respect to education must be noted. Elsewhere in the German territory, educational breakdowns come closer to following the expected pattern. The other large urban agglomerations, comprising more than 2 million inhabitants, have by far the highest rate of A-level graduates at 29%. Smaller but still significant poles, between 200,000 and 2 million inhabitants, display

intermediate rates, ranging from 22% to 24%. Finally, the rate of A-levels drops sharply to just 15% outside of these urban areas. The share of individuals with a lower-secondary or no degree largely follows the opposite pattern, ranging from 33% in the largest urban areas to 43% in parts of the country that do not encompass an urban area of 200,000 inhabitants or more.



The divide between East and West Germany could plausibly be playing a significant role in these patterns. In addition to the divergent economic trajectories of each country, their educational systems also differed in their structure. Indeed, East Germans appear significantly more likely to have completed a mid-secondary education: nearly 70% of them hold at least a *Realschule* degree, compared to just 54% of West Germans. However, it is worth noting that both sides feature about the same proportion of A-level graduates, suggesting that the difference in secondary education standards does not extend to higher education. The pattern across the metropolitan-peripheral divide is also largely unchanged. On both sides, the highest proportion of A-level graduates is found in large metropoles (28% in West German agglomerations over 2 million inhabitants excluding the Ruhr, 33% in Berlin), and the lowest

is found in the parts of the country that do not encompass an urban area of more than 200,000 inhabitants (15% on either side). Conversely, West Germans in the largest non-Ruhr urban areas were the most likely to hold at least a *Realschule* degree, while those in the smallest areas of settlement were the least likely to.

United Kingdom

The stratification used by Britain's 2011 census to measure educational qualification is particularly complex. Rather than focusing strictly on formal education, it is structured as a series of levels ranging from none (or entry-level) to 8, each of which encompasses a series of degrees deemed to be equivalent in rank. For example, Level 1 degrees include lower grades attained in the General Certificate of Secondary Education, the First Certificate in English, as well as a series of more specific qualifications labeled explicitly at Level 1. The dataset of parliamentary constituencies used for this analysis groups levels 4 and above into a single category, and also includes apprenticeships and miscellaneous qualifications that do not fit into the overall framework. I take a simple mean of the share of each category among individuals aged 16 and older for the constituencies of England and Wales. Overall, 23% of the residents of the mean constituency hold no qualification. Recipients of a Level 1 degree are 13%, and another 15% hold a Level 2. Less than 4% qualify through apprenticeship. 12% qualify at Level 3, and 27% reach Levels 4 or higher. Finally, about 5% of individuals 16 and over hold other types of qualifications. We thus again find a wide-ranging breakdown of education levels.

Figure 3.3 below examines how this breakdown varies across geography. There is again strong evidence for a metropoles-periphery dynamic, albeit with complexities. London stands out sharply from the rest of the country. On average in constituencies making up the core London area, 36% of individuals 16 and older have a level 4 qualification or higher, and only 18% have none. This high level of qualification partially extends beyond the core area to London's wider suburban ring. There, the average constituency has 29% of Level 4 graduates or higher, and 20% of individuals without any qualification. London's educational patterns stand out so much that every other geographic category displays below-average levels of qualification, with little meaningful variation. Even other large urban areas, with more than a million inhabitants, show little evidence of the high qualifications expected of metropoles.



The constituency dataset also provides a separate indicator measuring the share of inhabitants over 16 years old with a university degree. On average, this share only totals 17%, significantly lower than that of people holding a level 4 degree or higher. This suggests that university education remains a particularly selective attainment, and might thus be particularly reflective of the "winners" of globalization. Regardless, the geographic pattern of university degree holders, shown in figure 3.4 below, largely mirrors that of level-4-degree holders. The London area again starkly stands out, with 28% of over-16 residents in its average constituency

holding a university degree. This proportion drops significantly in London's suburban ring, to 18%, and falls further everywhere else, including just 14% in other urban areas with over a million inhabitants. Thus, when it comes to educational patterns, London is the only city in England and Wales that plays the role expected of a metropole, while the rest of the country, even relatively large cities, seem relegated to a periphery.



United States

The American Community Surveys feature a detailed measure of educational level for United States residents aged 25 or older. This fine-grained categorization provides a rare opportunity to examine the very top of the educational stratification, reaching the groups most endowed in human capital. According to the 2015-2019 American Community Survey, just 1.4% of residents over 25 held a doctoral degree, and 2.1% a professional one. Master's holders totaled an additional 9%, bringing this selective group to a total of 12%. Bachelor's graduates were far more common, representing 20% of the reference population, and a full 29% had attended some college without receiving any of the aforementioned degrees. This means that a full 61% of the sample had attended a university, a share considerably larger than those found in the European countries previously examined. The remaining share includes 27% of high school graduates, and finally 12% who did not complete a secondary education. These numbers show a slight improvement in educational levels compared to the 2005-2009 ACS data. Still, even then, 55% of Americans aged 25 or older had attended some college, a share far higher than comparable figures in France, Germany or the United Kingdom.

How does this breakdown vary in relation to the metropoles-periphery divide? Figure 3.5 below appears to fully confirm expectations. The largest Metropolitan Statistical Areas, with over five million people, saw the highest concentration of Bachelor's graduates and higher, totaling 33% in the 2005-2009 ACS and 38% in the 2015-2019 one. These figures remain high in other large MSAs, but fall to 25% and 29% in smaller ones and to just 17% and 20% outside of MSAs. This pattern remains the same when taking into account only the holders of a Master's degree or higher. Thus, individuals endowed with high amounts of human capitals are highly concentrated in the country's most populous metropoles. As Florida noted, however,

inequality is also found *within* these large urban poles. Indeed, MSAs over 5 million inhabitants also feature high rates of people who did not graduate from high school: 17% in 2005-2009 and still 14% in 2015-2019. These shares are almost as high as those found outside MSAs. Thus, even as metropoles concentrate the most highly-educated groups in society, they retain a sizable share of individual with little formal educational qualifications.



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Overall, the pattern emerging from all four countries is clear. In all except Germany, the largest urban agglomerations contain the highest concentration of highly-educated individuals, who, by virtue of their human capital, are best equipped to draw economic benefits from globalization. Although in Germany, the Rhine-Ruhr area constitutes an anomaly, likely as a product of its unique role in the country's industrialization, even there the pattern otherwise matches the expectations of the metropoles-periphery model come. Conversely, the most peripheral parts of each country are those seeing the lowest shares of highly-educated people, a clear indication of their disadvantage in a knowledge-based globalized economy.

Labor Force Structure

The labor market constitutes the centerpiece of the material divide between "winners" and "losers" from globalization. The types of position that one occupies in it play a key role in determining whether they stand to benefit from its opportunities or face the threats that higher international competition entails. Following a conjectural extension of the Stolper-Samuelson model, as developed countries tend to abound in human capital, workers who make intensive use of it should benefit from international trade, while those who require little should face greater pressure. Two related but distinct metrics provide an opportunity to examine how this divide plays out in the labor force. Occupation measures the type of work that an employee is expected to perform, and typically consists of a spectrum between "white-collar" occupations, which tend to involve intellectual work and decision-making responsibilities, and "blue-collar" ones, which center on the execution of more practical (often physical) tasks. This is far from a straightforward dichotomy, however, and the categories used by each country tend to be far more fine-grained. Still, in broad terms, we should typically expect "white-collar" occupations to require more human capital and thus constitute the "winners" from globalization, while "blue-collar" ones will often find themselves among the "losers". The other way to categorize the labor force is in terms of industries, representing the type of economic activity in which the individual is employed. Industry categorizations are typically quite detailed, involving specific sectors of economic activity. In general, however, the "losers" from globalization are found in industries that are particularly vulnerable to competition from less-developed countries, most notably the manufacturing of goods. On the other hand, industries that are net exporters in developed countries, such as communication and finance, as well as personal services that cannot be easily imported, tend to rank among the "winners". Following these broad sketches, we should expect to find a higher prevalence of "winner" industries and occupations in metropoles, and a higher concentration of "loser" industries and occupations in a country's periphery. The available data varies widely from one country to another, and sometimes only occupation or only industry can be fruitfully analyzed. Nevertheless, the picture that emerges from such analysis generally matches expectations.

France

The main framework used to categorize French residents based on their relationship to the labor force is the PCS system developed by the INSEE. Standing for *professions et catégories socioprofessionnelles* ("occupations and socio-professional categories") this system features three levels of classification, ranging from the very specific "occupations" to the broad "socio-professional groups", and encompasses both active and inactive individuals. There are in total eight socio-professional groups, of which six cover the active population. Active population categories include farmers (*agriculteurs exploitants*), self-employed (*artisans, commerçants et chefs d'entreprise*), managerial and professional occupations (*cadres et professions intellectuelles supérieures*), intermediate occupations (*professions intermédiaires*), clerical employees (*employés*), and manual workers (*ouvriers*). Finally, inactive individuals are divided between retirees and other inactive categories (primarily students).

Nationally, over 27% of the adult population in France are retirees, and another 16% are also inactive, bringing the total inactive population to 43%. These proportions vary significantly across the French territory, however, providing the first indication of a metropoles-periphery divide in the structure of France's labor market, as shown in figure 3.6 below. Retirees are underrepresented in metropolitan France, making up just 19% of the Paris urban unit and 24% of other units with more than 400,000 inhabitants. These percentages grow continuously as one moves to smaller and smaller urban poles, a pattern mirrored in the rings of those poles. In rural municipalities, the share of retirees reaches 38%. This sharp variation in the share of retirees matches the portrait of metropoles as poles of economic dynamism, attracting professionals looking for employment opportunities, while the periphery finds itself more suited to attract people without employment prospects. The share of other inactive individuals displays less variation, and presents a very different pattern: it is high in large urban units (between 17% and 20%), and notably lower elsewhere in the country (11% to 14%). This higher presence of non-retired inactive individuals in metropoles is likely driven by university students, which is in line with the prevalence of university graduates in these areas noted in the previous section.



How does France's active population break down? Looking exclusively at the six active occupational categories, we find that the majority is found in the four which form a clear continuum from "white-collar" to "blue-collar". On the "white-collar" end, managers and professionals make up 16% of the active workforce. Another 25% is made up of intermediate categories, which as their denomination suggests, occupy an intermediary rank between white-and blue-collar categories. On the latter end of the spectrum, we find 29% of clerical employees and 22% of manual workers. Two smaller groups complete this classification, with the self-employed (including shopkeepers) making up 6% of the active population, and landowning farmers totaling just 1.5%. The metropoles-periphery model would tend to suggest that white-collar occupations will be more common in large urban centers, and blue-collar ones outside of those. This is indeed what we find when examining France's territory, as shown in figure 3.7 below. Managers and professionals make up 29% of the active population in Paris' urban units, and still 20% in other units over 400,000 inhabitants. Their proportion drops sharply, below 10%, outside of large urban poles and their rings. In contrast, manual workers make up under 20% of the active population in urban units over 400,000 inhabitants, but their share

increases rapidly as the size of urban areas diminishes, reaching 31% in medium and small poles and their suburban rings. It is only slightly lower in rural and distantly connected areas, at 29%. Intermediate occupations and employees are distributed more evenly across the territory, although the former also tend to become rarer outside of large urban areas. Finally, and unsurprisingly, farmers are found almost exclusively in rural municipalities or in the rings surrounding small and medium-sized urban poles, while the self-employed are more spread out but also prevalently located in peripheral France.



French statistics' categorization of the active population by industry is unfortunately rather crude. By and large, this categorization follows the standard three-sector subdivision of modern economies. It distinguishes agriculture and extraction (primary sector), construction and manufacturing (secondary) and other activities, largely services (tertiary sector). As the tertiary sector is by far the largest, making up 78% of the French labor force, it is further subdivided into public and private employment, with the former making up 32% of the active population and the latter 46%. By contrast, only 3% of French workers are employed in
farming, 13% in manufacturing, and 7% in construction. Based on the metropoles-periphery model, we should expect the private tertiary sector, which comprises the service economy that has thrived in developed countries under globalization, to be concentrated in large urban centers, while other types of industries, especially secondary ones, are more prevalent in the rest of the country. As figure 3.8 below shows, this is indeed what we find. More than three in five workers are employed in the private tertiary sector in the Paris urban unit, and more than half are in other urban units over 400,000 inhabitants. As the urban units become smaller, this proportion drops consistently. It is even lower outside urban units, falling below one third in the rings of small poles and rural municipalities. Agriculture, construction and manufacturing follow the opposite trajectory, totaling only 13% of the workforce in the Paris unit, but 29% in small and medium-sized poles, and even 46% in the rings around those poles. Public sector employment is relatively evenly spread, although contrary to what Guilluy suggested, it is slightly more prevalent in urban areas (with the surprising exception of Paris) than in the periphery.



Germany

Germany's 2011 census data provides a fairly detailed categorization of the German workforce both in terms of occupation and of industry. To describe occupation, it adopts the International Labor Organization's ISCO-08 structure, which distinguishes ten "major groups" of occupations. Of those, two groups contain insufficient data in the census to be estimated reliably. Those groups ("Skilled Agricultural, Forestry and Fishery Workers" and "Armed Forces Occupations") are therefore pooled together into an "Other" category. As they only encompass about 2% of the active workforce, their role is negligible. The eight other groups, similar to their French counterparts, follow a relatively clear stratification from "white-collar" to "blue-collar". This stratification begins with managers, who total only about 5% of German workers. They are followed by the larger group of professionals, numbering 17%. Then come occupations classified as "technicians and associate professionals", who form an intermediate category and constitute around 19% of the workforce. Moving further toward the "blue-collar" end of the spectrum, we find about 14% of clerical support workers, and 16% of services and sales workers. Finally, three categories encompass expressly manual forms of work, starting with crafts and related trade workers, who constitute 13% of the German workforce, machine operators, who make up 7%, and a remaining 8% of "elementary occupations" which regroup the most routine forms of work. Together, these groupings thus provide a wide-ranging view of the diversity of the German workforce.

Figure 3.9 below examines this diversity through the prism of the metropoles-periphery divide. Once again, the Rhine-Ruhr area tends to confound the overall pattern. With 24% of managers and professionals and 25% of manual workers, it more closely resembles urban areas between 200,000 and two million inhabitants. Other areas over two million inhabitants, instead, feature more than 29% of managers and professionals, and only 20% of workers in the manual-

oriented categories of crafts, machine operating, and elementary occupations. They thus match Guilluy and Florida's description of large metropoles as hubs for professionals with high human capital drawing advantages from the opportunities afforded by globalization. Other, less large urban areas appear to occupy a middling position in this divide, with 24% of managers and professionals and 26% to 27% of manual workers. There is little variation in occupational patterns across this range of 200,000 to 2 million inhabitants, which suggests that these areas strike an intermediate profile between the metropoles and the periphery. In smaller urban centers as well as rural areas, the picture approaches what we might expect to find in the periphery. Only 18% of the workers in these areas are managers or professionals, and a full 32% are employed in manual occupations. The three occupation groups in between, namely technical, clerical support, and service or sales occupations, see comparatively little variation across geography. These patterns also remain virtually unchanged when considering East and West Germany separately.



The categorization of industries provided under the German census is also fairly detailed, if somewhat uneven. Once again, the economic activities surrounding agriculture, fishing and forestry are too small to be reliably estimated, and thus have to be grouped with miscellaneous other activities, totaling about 2% of the workforce. Those aside, about 19% of German workers are classified as working in mining and manufacturing industries, with an additional 1% working in energy, water and waste management, and 6% in the construction industries. Together, these 26% are grouped as part of the broader category of "production industries". Meanwhile, 17% work in industries involving trade and repairs, and 8% in the areas of transportation, storage and communication. Finally, the bulk of Germany's workforce is found in service-oriented sectors, including about 3% in finance and insurance, 13% in real estate and other housing-related activities, and 7% in the public administration. A full 24% works in other, unspecified service-based industries.

The breakdown of these industries varies across Germany's geography, as shown in figure 3.10 below. There appears to be little clear pattern in the variations of the share of workers employed in other service occupations, probably due to the amorphous nature of this category. Employees of the public administration also seem fairly evenly spread, although they are slightly more present outside of the large urban centers. However, employees in the two clearly defined private service industries, real estate and finance, are noticeably more prevalent in metropoles. Excluding the Rhine-Ruhr area, they make up the highest share of the workforce in urban areas with over two million inhabitants, at 21%. This percentage remains fairly high even in the Ruhr, at 18%, but decreases gradually in smaller urban centers, making up just 13% outside urban areas with at least 200,000 inhabitants. Thus, service-oriented industries sketch a picture that is remarkably close to the metropoles-periphery model. Transportation and related industries follow similar patterns, suggesting that they play a key role in the functioning of a globalized metropole. They represent 11% of the workers in the largest non-Ruhr urban

areas, but drop to 7% outside agglomerations of at least 200,000 inhabitants. Conversely, production-oriented industries employ few people in metropoles and significantly more in peripheral Germany. Their combined share of the workforce totals only 19% in non-Ruhr urban areas with over two million inhabitants. Even in the Ruhr area, whose history is closely tied to the rise of manufacturing, it only reaches 22%, below the national average. Outside of these especially populous areas, its share rises sharply, reaching 30% in the areas not encompassed by an urban agglomeration of 200,000 inhabitants or more. In examining the German workforce, we thus find many elements in line with the expectations of the metropoles-periphery model, although some notable outliers also emerge.



United Kingdom

The United Kingdom's 2011 census used the National Statistics Socio-economic Classification (NS-SEC) to categorize the country's workforce in terms of occupations. This system follows the same broad outline as the categorizations used for French and German employment statistics, with a few specificities. Once again, the bulk of these categories form a clear gradation from "white-collar" to "blue-collar". The NS-SEC is precise in its delimitation of "white-collar" occupations, distinguishing "higher managers", "higher professionals" and "lower managers and professionals". After these unambiguously "white-collar" groups, we find a category for "intermediate occupations", similar to that found in France's PCS system, then "lower supervisory and technical occupations". Finally, the two most explicitly "blue-collar" categories are denoted as "semi-routine" and "routine" occupations, a reference to the manual and repetitive nature of the tasks involved. In addition, three NS-SEC categories fall outside of this spectrum: small employers, active individuals who have never worked, and the long-term unemployed. The constituencies database used for this analysis also includes full-time students in the denominator used to calculate each group's share.

Averaging across the 573 constituencies of England and Wales, we find 2% of higher managers and 8% of higher professionals, for a total of about 10% of "elite" white-collar occupations. We then find an additional 21% of lower managers and professionals, bringing the total of white-collar occupations to almost a third of the reference population. Intermediate occupations make up 13%, and lower supervisors and technicians another 7%. On the blue-collar end of this continuum, 14% of the average constituency's population is employed in semi-routine occupations, and 11% in purely routine ones. Under a quarter of the average constituency's population falls outside this spectrum, among which almost 10% are small employers, 4% active individuals with no work experience, 2% in a situation of long-term

unemployment, and 9% are full-time students. This classification thus provides a wide array of occupational positions.

Figure 3.11 below examines this array across geographic categories, revealing patterns in line with the metropoles-periphery model, but also anomalies. As seen before, the London metropole stands out sharply from the rest of the country. In both the urban area strictly defined as well as its outer ring, managers and professionals together total over 36% of the average constituency's working-age population. The share of routine and semi-routine occupations is also comparable: 18% for the average urban London constituency, and 21% for the average constituency in its wider area. Under this metric, London's outer suburban ring appears almost as "metropolitan" as its inner core. As was the case with the educational breakdown, no other section of the country displays comparable patterns. Areas that would seems as the other most likely candidates to the "metropolitan" status, with over a million inhabitants, actually display markedly "peripheral" characteristics. The average constituency in these urban areas features a lower-than-average share of managers and professionals (26%) and a higher-than-average share of routine and semi-routine occupations (28%). Major urban centers under a million inhabitants similarly present few signs of the economic organization typically seen in a metropole. Most surprisingly, outside of urban areas with 200,000 inhabitants or more, the average constituency's share of managers and professionals rises again to 31%, the national average. Thus, London continues to stand out as a quintessential metropole, but the rest of England and Wales displays complex patterns that do not fit neatly into the metropolesperiphery model. Other categories seem distributed in ways that conforms more closely to this model. The share of technicians and lower supervisors, for example, increases steadily as one moves away from large urban poles. Meanwhile, full-time students are prevalent in London but also in other urban areas with over 400,000 inhabitants, and markedly less present outside of major urban poles.



An analysis of England and Wales' workforce in terms of industry reveals geographic patterns more closely in line with expectations. The breakdown of industries provided by the 2011 census is extremely detailed, offering 18 different categories of widely varying sizes. In the average constituency of England and Wales, slightly under 1% of the workforce is employed in agriculture, forestry and fishing, just 0.2% in mining, 9% in manufacturing, 0.6% in the supply of energy, 0.7% in water supply, 8% in construction, 16% in wholesale and retail trade, 5% in transport and storage, 6% in accommodation and food service, 4% in communication and information, 4% in finance, over 1% in real estate, 6% in professional, scientific and technical activities, 5% in administrative and support services, 6% in the public administration, 10% in education, 13% in health and social work, and an additional 5% in miscellaneous economic activities. While the level of detail in this breakdown means that some categories may vary in idiosyncratic ways, the general expectation should be that industries

found at the beginning of the list, focusing on extraction and production, are negatively affected by globalization, while those found later in the list, based on the provision of services, draw benefits from it.

Do these industries' positions toward globalization correlate with their situation in British urban geography? Figure 3.12 examines this correlation, finding a fairly unambiguous confirmation for the metropoles-periphery model. Once again, London's urban area stands out starkly. Taken together, agriculture, forestry, fishing, mining, manufacturing, energy and water supply, and construction, only add up to 12% of the workforce in the average urban London constituency. This share remains below 20% in the city's suburban ring, and even in other urban areas with more than 400,000 inhabitants. It increases further in middling urban poles between 200,000 and 400,000 inhabitants, and reaches its maximum in even smaller communities, at 22% of the workforce. Thus, we find here a pattern largely in line with the metropoles-periphery model. While these productive industries are more prevalent in the periphery, we find more service-oriented sectors in the metropoles. London again draws the lion's share of these economic activities: 32% of its urban workforce is employed in communication, finance, real estate, professional, scientific and technical activities, or administrative services. This share remains notably high in London's ring, at 26%. Outside of this extended London area, the share of these activities falls sharply. In English and Welsh constituencies not part of an area of 400,000 inhabitants or more, in particular, it is only 16% to 17% of the working-age population. Public administration, as well as the largely nationalized health sector, are more prevalent in the workforce outside of London's sphere of influence, validating Guilluy's depiction of the public sector as a reservoir of employment for the periphery.



United States

The American Community Surveys base their occupational categories on the Standard Occupational Classification developed by the Bureau of Labor Statistics. This system differs markedly from those employed by the three European countries, in ways that present both advantages and drawbacks. Its main distinguishing feature is to place more emphasis on the substantive economic activity in which an employee is engaged, at the expense of the degree of responsibility and decision-making that they exercise. For example, supervisors are not grouped into a single category such as "lower managerial occupations", but rather according to the type of work that they supervise. On the one hand, this means that this occupational ranking also fulfills some of the purposes of an industry-based classification, thus conveying useful additional information. On the other hand, this methodological choice somewhat blurs the clarity of the white-collar to blue-collar spectrum, making several categories ambiguous for the purpose of this analysis. Nevertheless, this ambiguity does not pose a serious challenge to the interpretation of this data.

The ACS somewhat simplify the SOC system, most notably by grouping eight separate categories into the umbrella group of "Professional and Related Occupations". This, together with "Management, Business, and Financial Operations Occupations" (which itself regroups two separate SOC categories), forms the core of occupations that can be identified as "whitecollar". On the opposite end, the ACS data regroups construction and extraction occupations with installation, maintenance, and repair occupations. A final category of "Military Exclusive Occupations" is omitted, as the ACS only considers the active civilian population. Conversely, unemployed individuals are included as their own category. Overall, managers, business and financial occupations made up 15% of the population in the 2015-2019 ACS, with professionals and related occupations representing an additional 22%. Stepping outside of this clearly white-collar block, we find a set of small categories defined by the type of economic activity that they fulfill, mostly pertaining to services. This includes occupations in healthcare support (3%), protective service (2%) food preparation and service (5%), building and grounds cleaning and maintenance (4%), and personal care (3%). In a similar vein, we find a category for sales and related occupations, representing 10% of the civilian active population. Moving further, about 11% of the civilian active population in the 2015-2019 ACS is made up of employees in office and administrative support occupations. Just 0.6% work in occupations tied to farming, fishing and forestry. Finally, the unambiguously blue-collar end of the spectrum includes 8% employed in construction, extraction and maintenance occupations, 5%

in production occupations, and 7% in transportation and material moving ones. A remaining 5% was unemployed.

Regardless of the methodological complexity of this classification, analyzing it in terms of the white-collar to blue-collar spectrum reveals a clear metropoles-periphery divide, as seen in figure 3.13 below. Managers, professionals, and affiliated occupations are a major presence in the largest urban centers. In Metropolitan Statistical Areas with over a million inhabitants, they make up nearly 40% of the civilian active population. Outside those hubs, this proportion drops sharply. In MSAs smaller than one million inhabitants, it is only 34%, and in counties not encompassed by any MSA, it falls to 29%. The quintessentially blue-collar occupations of construction, extraction, maintenance, production and transportation, follow the opposite trajectory as one heads away from large urban centers. In MSAs with two million inhabitants or more, individuals fulfilling these occupations only make up 18% of the active civilian population. In less populous MSAs, this proportion grows slightly, reaching 21% in the smallest category. Outside of MSAs, meanwhile, these occupations encompass a full 28% of the active civilian population. Predictably, farming, forestry and fishing occupations follow the same trajectory. The various service-related occupations that form the rest of this classification, meanwhile, show little significant change as one moves from metropoles to periphery, likely reflecting the fact that these services require physical presence to administer and fulfill a ubiquitous demand. The unemployment rate also varies little across the United States' geography. Examining the same data for the 2005-2009 ACS shows substantially identical patterns. Overall, occupational data available for the United States reveals a clear metropolitanperipheral divide.



Across the four countries under analysis, we find patterns that match the expectations of the metropoles-periphery model. In each country, the largest urban centers tend to see a higher concentration of individuals working in white-collar occupations or employed in service-oriented industries. By contrast, in less populous areas, blue-collar occupations and productive industries tend to predominate. This pattern emerges most starkly in France and the United States. Germany and the United Kingdom, meanwhile, present some complexity. In the former, the Rhine-Ruhr area lacks many of the features associated with metropoles, while in the latter, London holds a near-monopoly on these features. Still, the patterns described by Guilluy and Florida largely match the geographic structure of these countries' labor forces. We thus find clear evidence for hypothesis (**H1**) in labor force data.

Globalization is not merely an economic phenomenon, but also entails sociological and cultural implications for developed countries experiencing it. One particularly controversial such implication has been the growing exposure to foreign cultural norms and practices. This exposure can take a multitude of forms, but the most direct one is the growing presence of foreigners or individuals with a foreign background as a result of immigration. In some cases, even a community with a long history in the country can be perceived as "foreign" by its dominant cultural group. As noted by scholars such as Inglehart and Norris, such an increase in cultural diversity can trigger a backlash from citizens strongly attached to the country's traditional hegemonic identity, contributing to the rise of anti-globalization forces. Based on research on psychological responses to immigration, we can expect such a backlash to be most intense in culturally homogeneous areas, while areas where many residents already hail from foreign or culturally marginalized backgrounds should show a greater degree of openness to such backgrounds (Alba & Foner 2017, Maxwell 2019). Therefore, following, Guilluy, we should expect the geographic distribution of these areas to mirror the metropoles-periphery divide identified in previous sections. People with immigrant backgrounds and other groups culturally distinct from the country's traditionally dominant culture should usually be found in large urban centers, while the periphery should remain more culturally homogeneous. To test this expectation, I examine data on individuals with foreign backgrounds and minority ethnicities. Such data is not available in France, where state policy explicitly forbids its collection. Germany, the United Kingdom and the United States, however, provide a number of variables that can be examined as proxies for cultural diversity. In some cases, doing so requires careful interpretation, but the pattern that emerges from these analyses is clear: the larger an urban center, the higher the share of its population that hails from a foreign background or a minority culture.

Germany

Germany's 2011 census provides data on foreign residents in the country, as well as on nationals with a background related to immigration. Together, these indicators sketch a clear picture of a metropolitan-peripheral divide. Overall, under 8% of Germany's 2011 population did not hold German citizenship. Of those, 3% were citizens of another European Union country, another 3% held the citizenship of a non-EU European country, and 1.5% hailed from a different part of the world. These shares are far from evenly distributed across the country, as figure 3.14 below shows. In urban agglomerations of more than two million inhabitants, the percentage of foreigners reached 13% excluding the Ruhr area, and even there it remained high at 11%. This share then drops sharply in urban areas totaling less than a million inhabitants, and reaches a low of 5% in the parts of Germany not encompassed in any urban area of 200,000 or more inhabitants. It can be argued that EU citizens, due to the special rights they enjoy and their cultural proximity to Germans, should not be classified as foreigners. Excluding them does not noticeably alter the pattern, however. Non-EU citizens make up 8% of the population in the largest non-Ruhr urban areas and 7% in the Ruhr itself, but just 4-5% in urban areas between 200,000 and a million inhabitants, and 3% outside of those over 200,000. Considering East and West Germany separately also has little impact. Foreigners are far more common in the Western part of the country, where they make up 9% of the population compared to 4% in the East. Still, on both sides, the highest shares are found in metropoles, and the lowest in peripheral areas.



In addition to measuring the share of foreigners, the 2011 census also asked respondents about their immigration background, which provides a broader measure of multiculturalism in German society. In addition to the 8% of foreigners, we thus find 6% of naturalized German citizens who came into the country as immigrants, and another 5% who were born in the country but nevertheless have an immigration-related background. Thus, overall, a total of 19% of German residents had an immigration background of some type. Figure 3.15 below reveals that this foreign-background population is distributed unevenly across the country, mirroring the metropolitan-peripheral divide. Across urban areas with over 1 million inhabitants, over a quarter of those inhabitants had some immigration background. In communities smaller than 200,000 inhabitants, meanwhile, only 14% of them did. Counting only people with a direct immigration experience makes this divide even sharper: almost 20% of the inhabitants of the largest non-Ruhr urban centers fall in this category, whereas less than 10% do so outside of urban areas of 200,000 people or larger. A somewhat surprising pattern emerges when examining urban centers in between these extremes. While there appears to be a discontinuity across categories of mid-sized urban areas, it is in fact an artifact of the divide between East and West Germany, since the latter includes a far higher share of individuals with a migrant

background than the former, 22% compared to just 9%. Once this divergence is accounted for, the relationship between an area's size and its share of people with an immigration background is almost perfectly monotonous, as seen in figure 3.16 below for West Germany.



Finally, German census data also differentiates individuals with an immigration background according to where this background originates. Thus, we find that of the 19% of people with such background, 7% trace it back to a European Union country, 7% to another European country, and 5% to a non-European one. As before, there may be a plausible argument to exclude individuals from an EU background, and only consider the 12% who trace their immigrant background to a non-EU country. As shown in figure 3.17 below, such a

distinction does not substantially change the conclusions drawn previously. Non-Ruhr areas over a million inhabitants display an almost 17% share of individuals with an immigration background, with the Ruhr just below with 16%. Outside of urban areas over 200,000 inhabitants, meanwhile, this share drops to just 8%. Thus, across all data available from Germany, we find that foreign backgrounds are a distinct feature of major urban centers, and much rarer outside of them.



United Kingdom

The constituencies dataset provides data on the breakdown of inhabitants by their area of birth, as measured in the 2011 census. This measure can provide an indication of the degree of exposure to foreign cultures that British citizens would experience in different geographic settings. Overall, the share of inhabitants born outside of the United Kingdom amounts to just over 12% in the average constituency of England and Wales. Of those, 0.7% were born in the Republic of Ireland, a largely English-speaking neighboring country marked by longstanding (if often conflictual) cultural contact with the United Kingdom. Another 1.5% hail from

countries that were members of the European Union prior to 2004, with which the British have therefore had ample and recurring contact over the course of their stay within the Union. Just under 2%, meanwhile, were born in countries admitted into the union in 2004 or later. These were largely Eastern European countries formerly under the USSR's influence, and thus much more isolated from Western Europe until the most recent decades. The growing presence of immigrants from these areas was a prominent issue in the debate over the 2016 referendum to leave the European Union, with Brexit supporters raising both economic and cultural concerns around it. Finally, the remaining 8% are classified simply as born outside the European Union, without further specification.

Do these foreign-born inhabitants, and especially those born in more culturally alien areas, tend to concentrate in British metropoles? The available data seems to suggests so, as seen in figure 3.18 below. London again stands out starkly from the rest of England and Wales. In the London built-up area, the average constituency included almost a third of foreign-born inhabitants, dwarfing the proportions seen anywhere else. However, other major metropoles are not entirely shut out of this dynamic. In built-up areas encompassing 1 to 3 million inhabitants, the average constituency included 13% of foreign-born inhabitants. Outside these major hubs, this share steadily declines, falling to just 6% in areas with less than 200,000 inhabitants. These patterns remain essentially unchanged if we exclude individuals born in Ireland or other pre-2004 EU countries. The average constituency in the London area is still home to 28% of people born outside the EU as it existed before 2004, compared to just 5% outside of urban areas of 200,000 inhabitants or more. Thus, individuals with a foreign background tend to find a home in English and Welsh metropoles and are largely absent from their periphery.



In addition to places of birth, the 2011 census also provides data on British residents' self-reported ethnic identity. Ethnic diversity is only partially and ambiguously connected to the multiculturalism fostered by globalization, as some ethnic minorities have been present long before the current wave of globalization. Nevertheless, increased migration from developing to developed countries has undoubtedly contributed to growing ethnic diversity in the latter. Thus, ethnic data is a limited but useful indicator of the divide between globalization's "winners" and "losers". Across England and Wales, 87% of the residents of the average constituency identify as "White". This label represents the best available proxy for the traditionally dominant group in British society, although it also includes many of the Eastern European immigrants identified above. Of the 13% who choose a different ethnic identifier, 2% view their identity as "Mixed", 7% identify as "Asian", 3% as "Black", and about 1% choose another label.

The distribution of these non-White identifiers across the territory of England and Wales largely mirrors that of the foreign-born population, as seen in figure 3.19 below. The London area stands out starkly once more, with over 35% of the inhabitants in its average constituency identifying as something other than White. Black identifiers are particularly overrepresented in it, totaling 12%. Other metropoles with more than a million inhabitants also feature remarkable ethnic diversity, with 22% of the average constituency's population identifying as something other than White. Away from these metropoles, we find increasing ethnic homogeneity – even in London's suburban ring. Outside urban areas of 200,000 inhabitants or more, the average constituency counts only 4% of residents not identifying as White. As with the foreign-born population, and even more strikingly so, we thus find that individuals who identify with a minority ethnic group are heavily concentrated in English and Welsh metropoles and largely absent from their periphery.



United States

As with Germany and the United Kingdom, the American Community Surveys provide data on the share of foreign-born individuals present in the United States. This data is somewhat cruder, however, as it only distinguishes between naturalized citizens and non-citizens. Based on the 2015-2019 ACS, 13% of the United States' population was born outside of the country, a group split almost evenly between citizens and non-citizens. This represents a slight increase from a decade earlier, when 12% of U.S. residents were born abroad. The distribution of these foreign-born individuals fully matches the expectations of the metropoles-periphery divide, as seen in figures 3.20 and 3.21 below. Their share of the population is highest in Metropolitan Statistical Areas with over five million inhabitants (25% in 2015-2019). It decreases gradually as one moves toward smaller MSAs, totaling just 9% in 2015-2019 in those with less than a million inhabitants. Outside MSAs, meanwhile, only 4% of residents were foreign-born. This dynamic remains unchanged when considering only non-citizens. In 2015-2019, their share decreased gradually from 12% in the largest MSAs to just 2% outside of those areas. Thus, we find a clear and unambiguous metropolitan-peripheral divide in the distribution of individuals with foreign backgrounds in the United States.



The United States also features one of the most extensive and longstanding records of public statistics on ethnic self-identification. From the country's beginnings, the United States Census Bureau has regularly recorded data on the "race" of its inhabitants.¹ The methods of ascertaining a respondent's "race", as well as the specific categories recognized, has changed

¹ While devoid of scientific validity, the term has remained in use in the United States to refer to certain types of socially constructed identities connected to geographic origin and skin color.

significantly over time. Today, respondents are asked to identify with one or more among a set of labels provided in the census form, or to write-in their own preferred category or categories if they cannot find a suitable option. In addition to this longstanding "racial" categorization, the Census Bureau has recently begun separately asking respondents to declare whether or not they identity as "Hispanic or Latino". According to the official decennial census conducted in 2010, 64% of the United States population identified as "White" on the racial item and did not identify as "Hispanic of Latino". These non-Hispanic Whites constitute the country's dominant group, with those who fall outside of it often being grouped under the umbrella of "people of color". These include 12% of non-Hispanic Black (or African-American) people, 5% of non-Hispanic Asians, 0.7% of non-Hispanic American Indians and Alaska Natives (AIAN), 0.2% of non-Hispanic Native Hawaiians and Pacific Islanders (NHPI), 0.2% of other non-Hispanic races, and 2% of non-Hispanics who identified with multiple racial categories. Finally, there were 16% of people who identified as Hispanic or Latino, of whom 9% identified as White racially, while 8% did not. This complex ethnic breakdown and the specificity with which it is documented sets the United States apart from most European countries, and adds complexity to the analysis.

Overall, the distribution of people of color across the United States' territory matches the metropoles-periphery model, as shown in figure 3.22 below. They actually represent a majority of the residents of MSAs with over 5 million inhabitants, at almost 54%, and still over a third in MSAs between 1 and 5 million. Their share falls somewhat in smaller MSAs, then sharply outside of MSAs, reaching a low of 20%. However, this analysis is too crude to directly speak to the role of globalization. Indeed, many of the United States' minority ethnic groups do not owe their presence to the current phase of globalization, which began in the 1970s, but to much older historical events. Most infamously, the vast majority of Black Americans are the descendants of slaves brought by force to the continent from the 17th to the 19th centuries. Other ethnic groups found themselves on U.S. soil as a result of its territorial expansion: that is the case for most people identifying as AIAN (which describes the nations that settled the American continent prior to the arrival of Europeans) or NHPI (which includes Native Hawaiians, whose archipelago was annexed by the United States in 1898), as well as for many Hispanic or Latino identifiers in areas such as New Mexico and Puerto Rico, which were conquered militarily by the United States. Even immigration is a long-standing phenomenon in the United States, and many Hispanic and Asian Americans trace their roots to waves of immigration long preceding the current phase of globalization.



Given this complexity, it is difficult to determine which groups can be taken as proxies for the cultural diversity brough forward by globalization, and which are not representative of this phenomenon. A conservative, albeit still highly uncertain, estimate may be obtained by excluding African-Americans, AIAN, and NHPI. The remaining communities make up 36% of the population in MSAs over 5 million inhabitants, 26% of the population in those between 2 and 5 million, and only 10% of the population outside of MSAs, thus still broadly fitting the metropoles-periphery model. Finally, one possible way to account for the number of Hispanic people with longstanding histories in the United States is to further exclude those who identify as White, although such a method would also exclude many recent immigrants. Using this estimate, we find that 22% of the population in MSAs over 5 million inhabitants still falls in the remaining minority groups, compared to 17% of the population in those between 2 and 5 million, and just 6% of the population outside MSAs. Thus, regardless of how conservative one chooses to be in categorizing minority ethnic identifications in the United States, the pattern remains unchanged: the country's metropoles are far more culturally diverse than its periphery, and at least a significant share of this diversity is a product of globalization.

Across the three countries for which data pertaining to foreign background and ethnic identity is available, the distribution of this data fully matches the predictions of the metropoles-periphery model. Invariably, large urban areas are home to disproportionally high shares of residents who are foreign, foreign born, descended from a foreign background, or otherwise has and ethnic identity viewed as distinct from the dominant ethnic group. Individuals with these sorts of profiles become rarer and rarer as one moves toward smaller urban poles and eventually reaches the most peripheral areas. Since globalization brings foreign cultural influences to the fore, this geographic distribution matches the expected geographic sorting of the "winners" and "losers" from globalization into metropoles and periphery, respectively. Thus, Germany, the U.K. and the U.S. appear to confirm (**H1**) again. While it is impossible to conclude the same for France, anecdotes tend to comport with the idea that most people with immigrant backgrounds live in large urban areas such as those of Paris, Lyon and Marseille.

Beyond the analysis of educational, labor force, and sociocultural patterns, some additional variables help shed light on the complex ways in which globalization reshapes the territories of developed countries. Each of variables analyzed in this section is only available in one specific country, meaning that the patterns they reveal cannot be generalized beyond that country. Nevertheless, they provide valuable insights in less-salient aspects of the metropolitan-peripheral divide, and as such as worth briefly examining.

Internal Migration

While the previous section has examined the role of immigration from foreign countries in the growing chasm between metropoles and periphery, movement within a country's territory is also a key component of this dynamic. According to Guilluy, we should expect to see major migrations both toward and away from the largest metropoles. On the one hand, highly-skilled individuals seeking employment in the economic sectors favored by globalization, as well as foreign immigrants, should flock toward metropolitan areas. On the other hand, rising housing prices, along with distaste for cultural diversity, should push many people away from those areas and toward the periphery. Which of these dynamics outweighs the other? Guilluy does not provide a definitive answer, but the logic of his and Florida's arguments would suggest that more people are driven out of the metropoles than are able to live within them. France provides an opportunity to test this conjecture. The data provided by the INSEE includes a measurement of the net migratory balance by municipality. I analyze these balances for the period 1999-2016, as shares of the 1999 population, along the geographic categories previously established. Overall, France's population grew by 8% as a product of immigration over this period. Has this growth primarily affected the metropoles or the periphery? Figure 3.23 below shows that the latter has received the bulk of migration in France over these 17 years. In fact, the largest metropole in the country, the Paris urban unit, has experienced a net emigration, losing 2% of its 1999 population through this dynamic. Other "large poles" have all experienced below-average immigration or outright emigration. Medium and small poles, as well as Paris' wider ring, have matched the national average. Meanwhile, the rings of large urban poles other than Paris all seen immigration amounting to over 20% of their 1999 numbers, as have multipolar municipalities around those large poles. This matches Guilluy's account of the growth of exurban (or "periurban") living as a symptom of the increasing marginalization of people unable to afford living in metropoles.



Income

The metropolitan-peripheral model also does not provide a clear expectation as to the distribution of income across a country's geography. While metropoles are expected to benefit economically from globalization, this does not necessarily mean that their residents must be wealthier on average than the rest of the population. Indeed, as noted by Florida, the economic dynamism of large metropoles is a markedly inegalitarian one, concentrating large amounts of wealth as well as striking poverty. The concentration of recent immigrants, who often occupy the lowest position in a developed country's socioeconomic stratification, is a key component of this mechanism. Therefore, it is unclear how the distribution of income should be affected by the divide between metropoles and periphery. The American Community Surveys provide a measure of the aggregate yearly income generated in a given Metropolitan Statistical Area, which can be divided by that area's population to produce a measure of income per capita. I compute this measure for MSAs of different sizes. Across the United States, income per capita was \$34,103 in the 2015-2019 ACS, up from \$27,041 in the 2005-2009 surveys.

How does this income vary across the metropoles-periphery divide? As figure 3.24 below shows, the largest metropoles tend to be the wealthiest. In 2015-2019, MSAs with more than 5 million inhabitants had a per capita income around \$39,000. This figure declined slightly for smaller MSAs, then more sharply to \$31,000 in those under a million inhabitants. Outside MSAs, income averaged at \$26,000, two-thirds of what it was in the largest metropoles. Thus, there appears to be a considerable economic divide between metropoles and periphery in the United States. However, this divide has not especially grown over the past decade, with the 2005-2009 ACS showing comparable ratios. This topic would benefit considerably from further research, especially to reveal whether, as might be expected, income inequality is higher in the metropoles.



Housing Prices

One key variable that should set a country's metropoles apart from its periphery is the dynamics of the housing market. Guilluy and Florida argue that, due to the fierce competition for the economic opportunities offered by globalization in large metropoles, housing prices in these areas have skyrocketed. This phenomenon might explain the stagnant of even negative migration rates observed in French metropoles in a previous section. Other scholars have found a negative correlation between housing price growth in an area and its support for populist political parties (Adler & Ansell 2020). To connect this evidence within the broader metropoles-periphery framework, it is necessary to show that metropoles have seen steeper rises in housing prices than the periphery. Some data from the United States provides an opportunity to test this claim. The Federal Housing Finance Agency provides a measure of the growth in housing prices in an area over time, termed the House Price Index (HPI). Pegged at 100 for the year 1995, HPI data is available for all MSAs up to 2020. I use these indicators of price evolution from 1995 to 2020 to build weighted averages for each category of MSAs.

These averages are plotted in figure 3.25 below. As expected, the largest MSAs have experienced the fastest growth in housing prices. Those with a population of two million or more have seen their prices rise by a factor of 2.9 since 1995, with little difference between the MSAs with over 5 million inhabitants and those with 2 to 5 million. Smaller MSAs, however,

saw slower increases. Those between one and two million inhabitants saw their housing prices multiplied by 2.5 over the 25-year period, while MSAs with fewer than one million inhabitants experienced a 2.3-fold increase. Unfortunately, there is no data on the evolution of housing prices outside of MSAs, but these figures clearly suggest that the largest urban areas have seen the steepest housing price growth in the United States.



Business Size

Recent theories of trade have suggested that globalization may divide the economic landscape of developed countries not only along the lines of factor endowment or industry, but also along those of firm size. According to proponents of these "new new trade theories", larger firms, due to their economies of scale, are better able to adapt their production to tap into a foreign market, and thus benefit from expanded trade. Meanwhile, smaller firms face greater difficulty in meeting the costs involved with export, and thus are mostly the victims of foreign competition (Osgood 2017). These theories would thus categorize the owners and employees of a large-sized business as "winners" from globalization, while those who own or work at smaller business would rank among its "losers". Do these "winners" and "losers" also map into the geographic divide between metropoles and periphery?

Once again, data from the United States provides an opportunity to tentatively answer this question. The County Business Patterns series conducted by the United States Census Bureau features extensive data on the geographic distribution of businesses across U.S. territory, including a variable for business size. According to the 2014 CBP data, 55% of businesses nationwide were extremely small, employing just one to four individuals. An additional 19% employed 5 to 9 people, 13% employed 10 to 19, 9% employed 20 to 49, and 3% employed 50 to 99. Firms with more than 100 employees constituted a small minority, totaling just 2% of all businesses. However, these numbers are by their very nature skewed in favor of smaller businesses, since they employ fewer people. The CBP series also provides data on the number of employees hired by each of these business categories at the national level, painting a very different picture of the economic landscape. Only 6% of U.S. employees worked at businesses with 1 to 4 employees, while 8% worked at businesses with 5 to 9, 11% at businesses with 10 to 19, 17% at businesses with 20 to 49, 13% at businesses with 50 to 99, 16% at businesses with 100 to 249, 9% at businesses from 250 to 499, 7% at businesses from 500 to 999, and a full 14% at businesses with 1000 employees or more. This means that the median U.S. worker was hired at an enterprise with 50 to 99 employees.

Unfortunately, employee-level data is not available at a sub-national level. However, it is possible to estimate it using the nationwide average number of employees per category of business. For example, businesses with 1 to 4 employees in 2014 employed 1.7 people on average, while those with 1000 or more employed 2380 on average. Using these nationwide estimates, and applying them to MSAs of various sizes, we find ambiguous patterns, displayed

in figure 3.26 below. Small businesses do appear to be more prevalent outside of large urban areas. In MSAs encompassing more than a million inhabitants, about 39% of workers are employed by a business with less than 50 employees. In MSAs smaller than a million inhabitants, however, 44% of employees worked at businesses of this size, a proportion similar to that found outside MSAs. Thus, small business employment does appear to be rarer in the U.S.' metropoles. This gap is not necessarily filled by very large businesses, however. Indeed, the share of employees working at businesses with over 250 employees is only slightly higher than average in MSAs with a million inhabitants or more, around 31% and 32% depending on the specific category. While smaller MSAs see a particularly low proportion of employees working at these large firms, at 27%, the counties not included into an MSA actually display the highest proportion of any category, at 34%. Thus, while there are indications of higher-than-average business sizes in the metropolitan United States, this pattern is not entirely straightforward, and the variations are generally low.



Conclusion

Across a variety of economic, sociological and demographic variables, a wide gulf emerges between the metropoles and periphery of each of the four counties under study. This gulf largely matches the theories laid out by authors such as Guilluy and Florida, and tells a broader story about globalization. The individuals best equipped to take advantage of its opportunities appear to cluster in each country's largest urban centers, whereas those most likely to resent its dynamics are more prevalent outside of those centers, in smaller cities, distant suburbs, exurbs, and rural areas. This is true in the area of education, with metropoles featuring higher average levels of qualification than the periphery. This dynamic is also perceptible in labor market patterns, as metropoles contain a higher share of white-collar employees working in competitive service-sector industries, while the periphery is home to most blue-collar workers as well as to the manufacturing industries most threatened by globalization. Nowhere is this pattern starker than with regard to ethnic and cultural diversity, however: in the three countries for which data is available, larger urban centers invariably included a greater share of individuals with a foreign background or an identity diverging from the dominant group. Other indicators, only found in a single country, shed additional light on the extent and nature of this metropoles-periphery divide, although these conclusions cannot be generalized.

In light of this wealth of evidence, hypothesis (H1) can thus be fully validated: *within* each country under study, the largest urban centers and their close suburban rings tend to feature more employment in internationally competitive economic sectors, as well as higher levels of education and a higher share of inhabitants from immigrant background, than the rest of their respective country. Although further research is required to further characterize these findings, and determine whether they hold outside of the countries analyzed here, the evidence that globalization is driving a socioeconomic wedge between the metropoles and the periphery of developed countries is already compelling.

It is also important to note the diverse ways in which this metropoles-periphery divide shapes each country's geography. Unsurprisingly, France and the United States come closest to matching the ideal-type of the models laid out by Guilluy and Florida. In both countries, several large urban agglomerations clearly stand out from the rest of the country. The other two countries present some interesting variations. In the United Kingdom, London is the only urban area that clearly stands out, emerging as the dominant hub for globalization in the country. In Germany, meanwhile, the Ruhr Area lags behind other major urban poles despite being the largest of all, and the pattern is further complicated by the historical divide between East and West. These examples suggest that there is considerable diversity in the chasm created by globalization across the territory of developed countries. Nevertheless, in all the countries examined, this chasm still broadly separates metropoles from the periphery.

Chapter IV

Electoral Realignment across Geography

Having highlighted in the previous chapter the sharp socioeconomic divide splitting the territories of the four countries under study, I now move forward to inquire into the political consequences of this divide. While globalization does indeed appear to favor large metropoles at the expense of a country's periphery, this dynamic is not guaranteed to give rise to political conflict. Using Bawn's (1999) terms, the inhabitants of the metropoles have become "natural allies", as have those living in the periphery. However, the task of organizing politically around these natural alliances belongs to political entrepreneurs, who operate within the constraints of a specific political and institutional system. Thus, while globalization creates a potential for realignment, the realization of this potential is conditioned by a large number of contextual variables. As detailed in Chapter I, there are strong reasons to believe that a realignment is indeed underway in a number of Western countries, including the four under study. The main

purpose of this chapter, therefore, is to determine whether a realignment is unfolding specifically along the geographic lines of the metropoles-periphery divide. This purpose is encompassed in hypothesis (**H2**), which posits that *within each country, over the course of the observed period, the voting patterns of the largest urban centers and their close suburban rings tend to diverge from those of the rest of their respective country.*

To determine whether this divergence has occurred, I examine each country's election returns broken down to low levels of geographic aggregation. A critical test of **(H2)** requires a systematic measure of the extent to which a metropoles-periphery divide has come to shape geographic voting patterns. To carry out such a test, I simplify the geographic typology used in the previous chapter into a simple dichotomous variable. By measuring the extent to which this variable explains the variance in electoral results across geographic units, I construct a simple comprehensive indicator of the electoral weight of the metropoles-periphery divide, which can be tracked across elections. A consistent growth in this indicator provides clear evidence for the unfolding of a realignment. I supplement this evidence with illustrative charts showing the divergence in election results across the detailed typology used in the previous chapters.

In three of the four countries examined, this analysis produces strong evidence for a realignment, thus confirming (H2). In the first section of this chapter, I examine the geographic voting patterns of these three countries – France, the United Kingdom, and the United States – and present the evidence showing that the metropoles-periphery divide has grown increasingly influential in shaping them. I also highlight some notable specificities in the forms taken by the realignment in each country. Taken together, these findings provide strong evidence for the claim that the metropoles-periphery divide is a key driving force in realignment across the developed world. However, one country, Germany, proves the exception to this finding, with
no clear trend in the evolution of its geographic voting patterns. I dedicate a separate section to examining this anomaly, documenting the absence of a pattern and investigating potential confounders. This persistent null finding eventually leads me to discuss the limits of the metropoles-periphery framework.

Realignment across Three Countries

The political lives of France, the United Kingdom and the United States have seen major transformations over the past five years, all of which have been discussed as potential signs of a realignment driven by globalization. However, these political shifts do not, by themselves, prove that a realignment is taking place. Proving it, as noted before, would require showing that the pattern of "who votes with whom" has changed. Given the findings of Chapter 3, this pattern shift can be expected to at least in part be reflected in each country's electoral geography, along the lines of the metropoles-periphery divide. In other words, municipalities that are part of metropolitan cores should develop voting patterns increasingly similar to one another, and increasingly divergent from those outside those cores. In general, this electoral divergence should match the positioning of political parties and candidates toward globalization, so that political forces more favorable to globalization will find growing support in metropoles and those more hostile toward it will be more successful in the periphery. For the purpose of this study, however, I focus on examining whether geographic voting patterns have realigned along the metropoles-periphery divide, and only secondarily assess whether this realignment can be explained by a party or candidate's stances or rhetoric. To carry out this examination, I first develop a comprehensive indicator of the role played by the metropoles-periphery divide in voting patterns, using a dichotomized measure of the divide and leveraging the decomposition of variance. I then employ this indicator in analyzing the electoral patterns of France, the United Kingdom and the United States, in turn, complementing it with additional data on each country's election results. These analyses decisively show that a realignment has indeed taken place in these three countries along the lines of the metropoles-periphery divide, thus confirming (**H2**).

Measuring a Geographic Realignment

Although the detailed typologies constructed in Chapter 2 and employed in Chapter 3 allow for a rich and detailed analysis of geographic patterns, they are not suited to determining unambiguously if a realignment has taken place. Indeed, because realignment introduces a temporal dimension into the analysis, it becomes essential to precisely quantify the extent to which a given election's patterns are influenced by the metropoles-periphery divide, so as to compare this extent across elections. In order to construct such a summary measure, the first step is to collapse the typologies previously constructed into a simple dichotomous variable. In other words, I assign each of these geographic categories, either to the metropoles, or to the periphery. As noted previously, this process is highly reductive of the complexity of territorial organization in developed countries, and the resulting variable will only constitute a coarse approximation of the metropoles-periphery divide. However, this coarseness should bias the analysis against finding evidence of a realignment, meaning that if such evidence does in fact emerge, its validity will not be in doubt.

To assign geographic categories as metropoles or periphery, I first consider relative population size. Generally speaking, both geographic constructs can be expected to encompass comparable shares of a country's population, as this is a precondition for realignment. Guilluy conceptualizes "peripheral France" as being slightly larger than its counterpart, encompassing about 60% of the country's population (Guilluy 2014, p. 28). While there is no strong theoretical grounding for this definition, I adopt it for the sake of comparability, in the absence of a clear alternative. As such, I define as "metropoles" the categories featuring the largest core urban areas which, added together, encompass around 40% of their respective country's population, and define the rest as "periphery". This means that the suburban and exurban rings of large urban areas are categorized as part of the "periphery". This categorization, while reductive, seems to come closest to approximating the findings of Chapter 3. Thus, for France, this measure defines "metropoles" as urban units with more than 150,000 inhabitants, totaling 44% of the country's population. For England and Wales, this definition includes built-up areas with 400,000 inhabitants or more, encompassing 39% of the population. Finally, for the United States, I define metropoles as Metropolitan Statistical Areas with over 2 million inhabitants, which represent 44% of the country's population.

Having defined these dichotomous measures of the metropoles-periphery divide for each country, I proceed to determine the extent to which these measures shape the geographic voting patterns of a given election. To do so, I take advantage of the statistical principle of the variance decomposition formula. Put simply, this formula holds that, in a dataset that is divided in several subgroups, the variance of a variable across such dataset equals the variance between each subgroup's average plus the average of its variance within each subgroup. Applied to the data at hand, this means that, in order to determine how much the metropoles-periphery divide affects the voting patterns of a particular candidate, the total variance in such candidate's share of the eligible electorate across geographic units can be disaggregated into two quantities. The first is the variance between the candidate's average electorate share across the metropoles and the candidate's average electorate share in the periphery – this is the *explained* variance, as it can be directly ascribed to the metropoles-periphery divide. The remaining variance is equal to the mean between the variance in the candidate's electorate share across geographic units of the metropoles, and the variance in their share across geographic units of the periphery – which is the *unexplained* variance. This formula can be expressed mathematically as such:

$$Var(V) = Var_G[E(V|G)] + E_G[Var(V|G)]$$

Where V is the candidate's or party's share of the electorate, Var is the variance, E is the expected value (or mean), and G indicates a division into separate groups. In addition, to more accurately reflect the relative importance of geographic units, all variances and means displayed above are weighted by the total size of the electorate (that is, the number of eligible voters within a geographic unit).

Using this formula, I calculate the share of the explained variance (the first element on the right side) as a percentage of the total variance (the left side). I do so for individual parties and candidates, but also calculate this percentage for the sum of the variances in the shares of multiple parties and candidates in a given election. This provides a simple, comprehensive indicator of the importance of the metropoles-periphery divide in shaping geographic voting patterns. Given the large sizes of the datasets involved, and the myriad of factors that can contribute to geographic variations in electoral outcomes, we should expect the percentage of variance explained by the metropoles-periphery divide to be fairly small. However, more than percentages themselves, it is their evolution which constitutes the primary evidence for a realignment. If these percentages increase over time, this would clearly indicate that a realignment is occurring.

France

France's party system has seen seismic changes over the course of its most recent electoral cycle. The rapid decline of historically dominant parties and the rise to the forefront of brand-new or long-marginalized political forces constitutes major political events in their own right, and make of France a promising ground to test the hypothesis of a globalizationdriven realignment. Is such a realignment unfolding in France, and if so, is it bringing forth a geographic cleavage dividing France's metropoles from its periphery? To answer this question, I examine the results of five successive presidential elections, ranging from 1995 to 2017, including the first and second rounds. I use the method described above to calculate the extent to which the metropoles-periphery divide explains variance in the shares of the electorate received by candidates across municipalities.

I begin this analysis by examining candidates from the National Front – first Jean-Marie Le Pen from 1995 to 2007, then his daughter Marine in 2012 and 2017. Ever since the 1980s, the National Front has represented the foremost voice in opposition to France's political establishment. Its staunch opposition to immigration and the European Union has placed it in a strong position to garner support from globalization's discontents, and during Marine Le Pen's leadership, the party has focused on these voters with increasing appeals to economic and cultural nationalism. This stance appears to have benefited the party, making it a serious contender for the presidency. If a realignment is reshaping France's voting patterns along the FN's electorate. This is indeed what we find when examining the percentage of variance in the FN's vote explained by the metropoles-periphery divide, represented in Figure 4.1 below. In 1995, the divide between metropoles and periphery played no meaningful role in explaining the variance in the FN's electoral performance. In 2002, it still only explained 2% of this

variance, even in the second round where Jean-Marie Le Pen faced off with incumbent President Chirac, a quintessential figure of the establishment. Starting with Jean-Marie Le Pen's final run in 2007, however, and continuing with his daughter's subsequent campaigns, the share of the variance in FN vote explained by this divide has grown at a steady pace. In 2017, it explained nearly a fifth of the variance in Le Pen's vote in the first round, and over a fifth in the runoff. Given the considerable number of municipalities and the complexity inherent in geographic voting patterns, this is a remarkably high share of the variance to be explained by a dichotomous variable.



Examining the FN's performance along the detailed typology of French geographic areas confirms this pattern, revealing that its electoral support has become increasingly skewed toward France's periphery and away from its metropoles. Figure 4.2 below displays, for all first rounds, the difference between the FN's shares of the electorate garnered by FN candidates along this typology and their national share of the electorate. In other words, it shows how much better or worse the FN's results were in each category compared to the country as a whole in a given election. As this figure reveals, the FN has seen steady gains in the most peripheral areas of the country. Rural municipalities especially stand out: in 1995, Jean-Marie Le Pen

received his lowest share of the electorate in this part of the country, three percentage points below the national average. In 2017, his daughter won the votes of a percentage of the electorate two points higher than her national average in these same municipalities. The FN vote has seen similarly large increases in "multipolar" municipalities found at the outer fringes of large urban areas. Since 2007, FN candidates have received their highest shares of the electorate in these areas. By contrast, the FN's electoral performance has seen a relative decline in large urban centers. This is especially the case in the Paris urban unit, where Marine Le Pen received 8 percentage points less than her national electorate share in 2017. It is also apparent in other urban units with 400,000 inhabitants or more, where the FN used to poll above its national average but has now fallen below it. As expected for the leading critic of globalization in French politics, the FN has found growing success in peripheral municipalities, and comparatively little in large metropoles.



In contrast to the FN, France's government parties have generally taken a favorable outlook to most aspects of globalization, especially with respect to greater integration in the European Union. Attitudes toward immigration have been more mixed, with right-wing parties taking an increasingly hostile stance toward it since 2007. If a cleavage around globalization is emerging in French politics, we should therefore expect it to affect the voting patterns of these parties as well, leading them to increasingly align with the metropoles-periphery divide. There is some evidence for this dynamic. In particular, this divide does seem to explain a growing share of the variance in the Socialist Party's geographic voting patterns in the first round, as shown in Figure 4.3 below. In 1995, the metropoles-periphery divide had no apparent bearing on the variance in Lionel Jospin's share of the electorate. In 2017 meanwhile, Benoît Hamon's pattern of support was noticeably correlated with this divide, with 8.5% of the variance being accounted by it. This growing alignment with the metropoles-periphery divide appears to reflect the party's increasing reliance on large urban cores (especially Paris') and weakness in smaller areas, thus fitting the profile of a party of the "winners" of globalization. Interestingly, however, the metropoles-periphery divide played little role in explaining the PS candidates' second-round results when they qualified for it in 1995, 2007 and 2012.



The picture emerging from the patterns of electoral support for France's traditional right-wing parties is far less clear. As Figure 4.4 below shows, the share of the variance in these candidates' share of the electorate explained by the metropoles-periphery divide is generally low, rarely exceeding 2% of the total variance. In the cases when it does exceed this level, as with Jacques Chirac's 2002 first-round candidacy or Nicolas Sarkozy's 2007 and 2012 second-round runs, these candidates tend to perform slightly better in France's periphery than in its metropoles. However, this tendency was wholly absent of the most recent election, where just 0.1% of the variance in François Fillon's shares of the first-round electorate could be explained by the divide. The traditional French right's ambiguous stance on globalization, championing integration in the E.U. while opposing immigration, seems to have allowed it to transcend the metropoles-periphery divide. However, as Fillon's failure to qualify for the 2017 second round showed, this lack of alignment along the emerging cleavage can become a weakness for right-wing candidates.



Finally, the center of the political spectrum can be expected to constitue a major source of the realignment in France's political geography. Emmanuel Macron presented his 2017 candidacy as an explicit defense of the EU and a promotion of international openness. As such, more than any prior centrist candidacy, his should find particularly strong support in the metropoles compared to the periphery. Figure 4.5 below compares the percentage of variance in support for Macron's first- and second-round candidacies in 2017 to the equivalent percentages for François Bayrou, the foremost centrist candidate running in the previous three presidential elections. Bayrou's endorsement was key to Macron's rise to the forefront in 2017, and Macron's emphasis on transcending the left-right divide echoed much of Bayrou's prior rhetoric. However, while Bayrou's electorate showed little alignment along the metropolesperiphery divide, Macron's is clearly concentrated in metropolitan areas. The divide explained 7.5% of the variance in Macron's first-round voting patterns in 2017, compared to less than 2% for Bayrou's three candidacies. In the 2017 runoff, the share of the variance in Macron's voting patterns explained by the divide grew even higher, to 12.4%. Unsurprisingly, these patterns reflect Macron's predominantly metropolitan's base of support. In the first round, he garnered by far his highest share of the electorate in the Paris area, with 23.1%, while receiving his lowest in rural (16.4%) and multipolar (15.9%) municipalities.



These cursory examinations of the voting patterns of the most notable presidential candidates show substantial evidence for a realignment along the lines of the metropolesperiphery divide. Candidates hailing from the FN, the PS, and the centrist area of the political spectrum have seen growing share of the variance in their electoral results explained by such a divide, although those from France's historical right-wing government parties have not. The growing significance of the metropoles-periphery divide in the structure of France's voting patterns is thus apparent across most, though not all, of the political spectrum. To fully ascertain whether France's electorate as has realigned, I take the sum of the explained variances in the shares of the electorate for every candidate running in that election, and divide it by the sum of total variances for these same candidates. This sum thus represents an estimate of the overall importance of the metropoles-periphery divide in explaining geographic variations in the patterns of a given election.

The results of these calculations are displayed in Figure 4.6 below. It unambiguously shows that the metropoles-periphery divide has grown from a marginal factor in shaping France's electoral geography to a remarkably potent one. Aside from a slight dip in 2007, the share of the variance in first-round results explained by the divide has grown steadily, from 1.2% in 1995 to 10.3% in 2017. This growth is even more striking when considering secondround results. The metropoles-periphery divide accounted for only 1.4% of the variance those results in 1995, but went on to explain a remarkable 16.6% in 2017. Thus, (H2) is generally borne out in France's voting patterns. It is also notable that, while the share of explained variance in first-round results grows fairly gradually, from a very low 1995 result to a plateau between 2002 and 2012 and then to a higher level in 2017, the growth is far more sudden for second-round results. As late as 2012, only 2.6% of the variance was explained by the divide, but this share jumps more than six-fold in the subsequent election. This might be a product of the different voting incentives in a two-round system: in the first round, the incentive for tactical voting is somewhat lessened compared to a strict FPP system, leading to a more gradual realignment. In the second round, however, choices are constrained to a binary, which, depending on the candidates' identity, might either suppress the new cleavage or further exacerbate it. Regardless, the evidence for a realignment along the metropoles-periphery divide in French electoral geography is compelling.



United Kingdom

One of the first events that sparked intense debates about the rise of "populism" across the Western world came in June 2016, when a majority of the United Kingdom's voters chose to leave the European Union in a referendum. The following years saw intense international negotiations as well as internal partisan conflict revolving around the "Brexit" issue, resulting in two early parliamentary elections in the span of four years. Despite this intense political turmoil, however, the country's party system has changed very little, and remains dominated by the Conservative and Labour parties. "Populist" political parties running explicitly on Brexit and other anti-globalization positions have only found fleeting electoral success. Thus, if a realignment has occurred in the UK's politics, it must have shifted the electoral coalitions of the established political parties. To ascertain whether that is indeed the case, I examine the geographic voting patterns of seven elections to the House of Commons, spanning from 1997 to 2019, in England and Wales. To determine the extent to which the metropoles-periphery divide has come to shape these elections, I again employ the method of variance decomposition. I calculate the variance in each party's share of the eligible electorate across constituencies, then measure how much of this variance can be explained by the dichotomous variable separating metropoles from the periphery. The results of this calculation are displayed in Figure 4.7 below for Britain's three main historical parties. They clearly show that the country's two major parties have seen their geographic voting patterns increasingly shaped by a metropoles-periphery cleavage. The share of the variance explained by such a cleavage has grown sharply for both parties, although the pace of this growth has varied. In the earlier elections, Conservative voting patterns were more sharply aligned with the divide than are Labour's. However, the share of explained variance in Labour voting patterns rose sharply in 2010 and 2015, before the Conservative share once again caught up in 2017. By 2019, the dichotomous variable explained a quarter of the variance in both parties' geographic voting patterns, a remarkably high share to be explained by a simple dichotomous variable. Thus, the UK's established two-party system, unlike France's, seems to have adapted to the realignment.



To better understand why that is the case, it is useful to delve into the more detailed typology of geographic areas developed in the previous chapters. Examining the voting patterns for the two major parties along this typology makes it clear that the Conservative party has increasingly seen its voter base skew toward the periphery, while the Labour party has seen its own drift toward large metropoles. Figure 4.8 below displays the difference between the share of the electorate received by Conservative candidates in a given area and the Conservatives' national share, and Figure 4.9 does the same for the Labour party. Thus, these figures together display the relative evolution of these parties along the geography of English and Welsh metropoles and periphery. The patterns they reveal are stark. The Conservative has seen increasing success outside of urban areas with 200,000 inhabitants or more, going from exceeding its national share by less than 3 percentage points in 1997 to doing so by nearly 6 points in 2019. It has also seen slight improvements in smaller urban areas in the most recent elections. However, it has seen a sharp relative decline in the London area in the most recent elections, going from a 2-point deficit relative to its national electorate share in 2015 to an 8point deficit in 2019. The Labour party's patterns are almost a mirror image, showing sustained relative growth for the party in the London area and decline in smaller communities. In 2005, Labour's share of the electorate in London was almost identical to its national share, whereas in 2019 it was 6 points higher. The two parties' opposing positions on the emerging cleavage might be interpreted as the outcome of what Meguid (2005) described as an "accommodative strategy". The Conservative government's embrace of a "hard Brexit" stance in negotiating for the country's withdrawal from the European Union, and the Labour party's staunch criticism of this stance, led voters to sort themselves between the two parties on the basis of their position toward globalization.



What about the Liberal Democratic party? The country's historical third-party has taken an even stronger stance than the Labour party against the Conservative government's effort to leave the E.U., eventually proposing in its 2019 campaign to simply ignore the results of the 2016 referendum. The party's positioning as a staunch advocate of globalization is longstanding and goes beyond the Brexit issue. Yet, Figure 4.7 showed that the metropolesperiphery divide explained a vanishingly small share of its geographic voting patterns. This surprising null finding is in part a product of the historical distribution of Liberal Democratic support. Figure 4.10 below illustrates this distribution, showing, once again, the difference between the party's electorate share across the typology of geographic area and the party's national share. As this chart reveals, the Liberal Democrats originally polled better in the periphery. In 1997, the party received its highest shares outside of urban areas with over 200,000 inhabitants, exceeding its national share about 2 percentage points there. Meanwhile, it received lower support in large metropoles, polling 2 points below its national share in London. This pattern likely represents the remnant of an older partisan alignment, unrelated to the new cleavage brought about by globalization. Examining Figure 4.10, we see that this older alignment has eroded: the party has found relative success in London, where it now polls 3 points higher than in the country as a whole, and has experienced relative declines in smaller areas. In other words, the geographic voting patterns of the Liberal Democratic party are indeed in the process of conforming to the globalization cleavage. However, this process first requires dealigning from the party's earlier, counterintuitive pattern. This dealignment is what is reflected in Figure 4.7.



Beyond these three historical parties, the United Kingdom has also seen occasional manifestations of an explicitly "populist" and anti-globalization vote, which provide further opportunities for the expression of a metropoles-periphery cleavage. The two most notable such moments were the 2015 parliamentary election, which saw a breakthrough of the United Kingdom Independence Party (UKIP), and the 2016 referendum, which saw a majority of English and Welsh voters choose to leave the EU. In both cases, the metropoles-periphery divide goes a long way toward accounting for the geographic distribution of these votes. It explained 10.9% of the variance in the UKIP's share of the electorate across constituencies, a percentage comparable to those of the two major parties. Unsurprisingly, this explanatory power is due to the peripheral skew of the party's electorate. The UKIP received its weakest result in the core London area, with only 5.9% of the eligible electorate. In contrast, it exceeded 10% of the electorate in London's outer ring, as well as in constituencies located outside urban areas of 200,000 inhabitants or more. The metropoles-periphery divide also explained a similar 11.3% of the variance in the share of valid votes cast in favor of leaving the E.U. Once again, the detailed breakdown of these geographic voting patterns, shown in Figure 4.11 below, reveals the expected results. Support for Brexit is at its highest in relatively small communities,

peaking at 59% in areas between 200,000 and 400,000 inhabitants but remaining high at 56% in less populous areas. Conversely, the only part of England and Wales to oppose Brexit was the London area, where only 42% of voters supported leaving the Union. Thus, the realignment of the U.K.'s political geography was a key factor in the referendum's outcome.



To fully assess the extent and pace of the realignment unfolding in the United Kingdom, I again add the variances in all the parties' shares of the electorate to form an aggregate measure. Unfortunately, because the parties whose results are available in the dataset varies from one election to the next, this measure is not as systematic and comprehensive as the one presented for French presidential elections. Nevertheless, it should capture the vast majority of the geographic variance in each election. The results are displayed in Figure 4.12 below, and fully match expectations. The share of the variance explained by the metropoles-periphery divide has grown steadily election after election, from 6% in 1997 to nearly 20% in 2019. This constitutes clear evidence for realignment, and thus provides further confirmation for (**H2**). It is noteworthy that this growth is largely gradual, and does not display the sharp discontinuity that might be expected in light of the U.K.'s first-past-the-post voting system.



United States

The United States' rigid two-party system, in place since the mid-19th century, entails that any realignment is likely to unfold within the two major parties, reshaping their voting bases and policy commitments. Donald Trump's victory in 2016 has been interpreted as one such realignment, owing both to Trump's clash with the Republican establishment and to his victory in traditionally Democratic-leaning states. These factors, however, are not sufficient to demonstrate that a realignment has occurred. In light of Trump's reelection defeat, it becomes particularly important to ascertain whether his candidacy durably reshaped voting patterns in the United States, or if it proved a temporary deviation from the norm. To answer these questions, I examine the geographic voting patterns of the past eight presidential elections, from 1992 to 2020, through the lens of the metropoles-periphery divide.

Analyzing election returns in the United States is made relatively straightforward by the country's strict two-party system. In most elections, the two major parties tend to garner the overwhelming majority of the votes cast. In addition, estimates of the eligible electorate at the country level are rarely available, which means that unlike with previously analyzed countries, I must calculate candidates' vote shares as a percentage of votes cast, rather than of the whole electorate. This means that almost all relevant information about geographic voting patterns in a given election can be garnered by simply calculating the difference between the two major party candidates' shares of the vote. I compute this metric, then use it to determine, for each election, the share of its variance across counties that can be explained by the dichotomous variable representing the metropoles-periphery divide. Once again, this provides a conservative estimate of the extent to which geographic voting patterns in the United States align with this divide over the course of the observed period.

The results of this analysis are pictured in Figure 4.13 below. They reveal a clear and sustained increase in the role of the metropoles-periphery cleavage in U.S. elections. This increase does not start with Trump's election in 2016: instead, between 1992 and 2000, the share of the variance explained by the metropoles-periphery divide had already more than doubled, from 8.1% to 16.4%. The subsequent elections see a stabilization of this share,

fluctuating between 15% and 16% until 2012. With the 2016 election, however, a new jump occurs, bringing the share of variance explained by the divide to a new high of 22.5%. Thus, as suggested, the 2016 election did not single-handedly trigger a realignment, but accelerated a movement that was already underway. In the most recent 2020 election, the share of variance explained remained virtually unchanged, at 21.7%. This marginal dip indicates a pause in the realignment dynamic, but also confirms that the effect of the 2016 election was a long-term shift rather than a one-time fluctuation. The metropoles-periphery divide continues to account for more than one fifth of the variance in the U.S.' geographic voting patterns, a considerable explanatory power for a simple dichotomous variable to exert.



However, it is possible that the long-term impact of the realignment brought about by the Civil Rights movement, which began in the 1960s but continued to unfold well into the 21st century, might affect these figures. This realignment had especially dramatic implications in the Southern states, where it led to the enfranchisement of African-American voters and White voters' turn toward the Republican party. To check for this potential confounder, I exclude

from the analysis the 14 states typically considered as Southern.¹ Figure 4.14 below displays the share of the variance in the relative margins explained by the metropoles-periphery divide when these states are excluded. The figures largely mirror those for the country as a whole, with the exception of a surprising decline in the explanatory power of the divide from 2000 to 2008, when the share of variance explained dropped from 20.2% to 14.5%. While this represents a substantive discontinuity in the realignment dynamic, the overall pattern remains one of growth, with 2016 marking a high point and 2020 almost matching this level.



Examining geographic voting patterns across the detailed typology of U.S. counties based on Metropolitan Statistical Areas sheds light on the nature of this realignment. Over the course of the past three decades, the United States' large metropolitan areas have supported Democratic candidates by increasingly commanding margins, whereas the rest of the country has become increasingly favorable to Republican candidates. Figure 4.15 below captures this dynamic, by charting the difference between Democratic and Republican vote shares in each category relative to the overall difference between them at the national level. Positive values

¹ Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

represent a higher relative Democratic margin (meaning that Democratic candidates outpace their Republican opponents by a margin larger than the national margin), while negative values represent a higher relative Republican margin. As the figure shows, Democrats have seen considerable relative gains in the largest MSAs, while Republicans have seen equally massive gains in smaller MSAs and the rest of the country. A gap already existed in 1992, when Bill Clinton's winning margin was 7 points higher in MSAs over 5 million inhabitants than it was in the country as a whole, whereas it was 5 points lower in MSAs with less than a million inhabitants and outside of MSAs altogether. Over the next elections, however, this modest gap has evolved into a wide gulf. In 2020, Joe Biden's winning margin in the largest MSAs was 21 points higher than his nationwide margin, a 14-point increase. Meanwhile, Donald Trump's margin in counties non encompassed by an MSA was a full 36 points better than in the country as a whole, a 31-point relative Republican trend. Democrats also saw major improvements in MSAs between 1 and 5 million inhabitants, whereas Republican candidates slightly improved their relative level of support in smaller MSAs.



These patterns provide a clear picture of the realignment underway in the United States' political geography along the lines of the metropoles-periphery divide. They show that, even before Donald Trump's political debut, the Republican party had already begun to see its voter base align with the United States' periphery, whereas Democratic voters had increasingly concentrated in large metropoles. The 2000 election, in particular, appears to have marked a sharp divergence between the two geographic entities. The 2016 election further accelerated this trend, leading to a wider than ever gulf between Democratic large metropoles and a Republican periphery. This provides a clear confirmation for (H2) in the United States, proving that a realignment is indeed ongoing there. Unlike in France and the U.K., this realignment appears to have unfolded less gradually, instead being propelled by more distinct bursts such as 2000 and 2016. This comports with the United States' highly majoritarian electoral system, which initially blunts realignment but eventually leads to more sudden shifts. These findings also corroborate a widespread narrative in mainstream political discussions, which holds that the United States is increasingly polarized between overwhelmingly Democratic major urban areas and an overwhelmingly Republican expanse of territory outside of these areas. Political polarization is a major topic in the study of contemporary U.S. politics, of which this geographic divergence is only one facet. Still, the metropoles-periphery divide appears to at least partially explain the common observation that Democrats and Republican increasingly live in separate political "bubbles".

For decades, Germany surprised observers by lacking a major "right-populist" party challenging globalization in its political life. In documenting the rise of political conflicts over globalization in Western European countries, Kriesi et al. (2008) described Germany as "the dog that didn't bark". This German exception may have come to an end in the past few years with the rise of the AfD, which shows similarities in its rhetoric and policy focuses to the "rightpopulist" parties seen elsewhere in Europe. Once again, however, the mere presence of a new political force does not guarantee that a realignment has taken place - and, if so, whether such a realignment follows the lines of the metropoles-periphery divide. Indeed, evidence for such a realignment in Germany's political geography proves scant. All attempts to identify a growing metropoles-periphery divide in the country's geographic voting patterns are unsuccessful. As such, Germany presents this research agenda with a null finding, bringing to light the limits of the metropoles-periphery model. In this section, I examine this null finding and its implications for future research. First, I describe this null finding, using the same analytical methods employed in the previous section to successfully identify realignments in France, the United Kingdom and the United States. I then show that this finding holds even when accounting for potential confounders reflecting unrelated geographical differences, confirming that it is not a mere artifact. In light of this finding, I delve deeper into Germany's political geography, drawing connections with the previous chapter in an attempt to explain the lack of a clear-cut metropoles-periphery divide. I conclude this section with a conjecture regarding the socioeconomic organization of Germany's territory and its implications for its political geography under globalization, leading me to a broader reflection on the conditions required for the metropoles-periphery model to be relevant.

A Null Finding

To seek evidence for a geographic realignment in German politics, I examine the results of the last 7 Bundestag elections, from 1994 to 2017. As with the countries examined in the previous sections, I simplify the layered typology of Germany's territorial organization into a simple, dichotomous variable representing the metropoles-periphery divide. In this case, I define metropoles as the urban areas with more than a million inhabitants, and place the rest in the periphery. This results in classifying about 40% of the German population as metropolitan and 60% as peripheral, a proportion precisely matching Guilluy's estimates. Then, I once again use variance decomposition to calculate the total variance in each party's share of the electorate across administrative districts, and the share of such variance explained by the dichotomous metropoles-periphery variable. The results of these calculations are displayed in Figure 4.16 below, showing the extent to which the voting patterns of the six prominent German parties (including the newly emerged AfD) can be explained by the divide.



This chart presents some notable patterns, but no discernible temporal trend. The Green party stands out, with a remarkably high share of its geographic voting patterns being accounted for by the metropoles-periphery divide. In 2002, this simple dichotomy explained nearly a third of all variation in this party's electoral strength across districts. Unsurprisingly, extremely high value reflected a concentration of the party's support in the metropoles. That year, the Green party was supported by 10.6% of eligible voters in urban areas with 2 to 4 million inhabitants, but only 4.7% of them outside of areas with over 200,000 inhabitants. The party's largely metropolitan base of support makes sense, as the party has been a strong advocate for multiculturalism and changing social norms. However, since 2002, the party's voting patterns have seen their alignment with the divide steadily decline over time, dropping to just 13% in 2017. This declining trend runs directly counter the expectation of a realignment around the metropoles-periphery cleavage. It suggests that, at least with regard to one party, this cleavage has weakened rather than emerged to the forefront.

More important than the relatively small Green party are Germany's main governing parties, the right-leaning CDU/CSU and the left-leaning SPD. Both parties have controlled the chancellorship during the 27 years covered by this analysis, 20 years for the CDU/CSU and 7 for the SPD. Since 2013, these parties have governed together at the federal level, forming what was referred to as a "grand coalition". As such, those two parties bear the most responsibility for the country's strongly pro-globalization orientation over this period, whereby it played a key role in the reorganization of the EU's economy and institutions and welcomed a large number of refugees from the Middle East during the mid-2010s. If a political cleavage around globalization has emerged in Germany and divided the country's territory between metropoles and periphery, then, we should expect this process to have a particularly major impact on these two parties. However, this is not what Figure 4.16 suggests. Neither party's voting patterns seem to have become increasingly shaped by the metropoles-periphery divide

over the course of this period. The effect of this divide on the CDU/CSU's voting patterns has increased somewhat, going from explaining 4% of its variance in 2005 to 12% in 2013, but this movement is not sustained beyond these election cycles. Similarly, the share of variance in SPD voting patterns explained by the divide appears to increase between 2002 and 2013, from 7% to 17%, but then falls back to 8% in 2017. These temporary increases might carry some significance, but they are clearly insufficient to prove that the electorates of these parties have realigned along the metropoles-periphery divide.

In addition, delving deeper into these voting patterns shows that they largely do not conform to the metropoles-periphery divide. Figures 4.17 and 4.18 below show the CDU/CSU's and the SPD's shares of the electorate along the detailed typology of geographic areas, minus their national shares of the electorate. Figure 4.17 is particularly striking, as it reveals that, throughout the observed period, the CDU/CSU received its highest levels of support in the most peripheral parts of Germany. Indeed, areas that weren't encompassed in an urban agglomeration with 200,000 inhabitants or more were the only geographic category where the union received a higher share than its national average. Meanwhile, it received significantly lower-than-average support in the Rhine-Ruhr area and the other largest German metropoles. This peripheral alignment stands in direct contradictions with the expectations of the metropoles-periphery model for a party strongly aligned with Germany's pro-globalization policies. The SPD's voting patterns are somewhat more consonant with this model, as the party tends to receive higher share in some – though not all – large urban areas. However, there is no indication that this gap in the SPD's electoral success has increased over time. The most recent election actually sees the gap declining, although that is partially due to the party's poor overall showing.



Other German parties also show little sign of seeing their electorate align to either side of the metropoles-periphery divide. The only potential exception is the FDP, which in 2017 saw 18% of its geographic voting patterns explained by the metropoles-periphery divide, far higher than in prior election cycles. Unsurprisingly for a center-right party favorable to free markets and culturally liberal, the party saw its best results in areas with 2 million inhabitants or more, receiving the votes of 9%-10% of the electorate, but only received the support of 7% of the electorate outside of urban areas with 200,000 or more inhabitants. However, it remains difficult to say if this constitutes a durable trend in the party's voting patterns. Meanwhile, the divide only explained a very small share of the variance in support for the Left party and its

predecessor the PDS throughout the period. Even the AfD, often portrayed as the voice of German voters' discontent toward their government's pro-immigration and pro-EU policies, saw only 11% of its voting patterns explained by the metropoles-periphery divide in 2017.

Examining Potential Confounders

With a simple analysis of Germany's electoral geography having failed to find evidence for a realignment along the metropoles-periphery divide, I proceed to examine other factors that might obscure such evidence. Given that the analysis is geographic in nature, these confounders must also be rooted in the country's geography. In this respect, the most important factor to consider is the country's historical division between East and West. Even three decades after the reunification, the socioeconomic gap between the two former political entities remains considerable. Notably, this gap translates into markedly different voting patterns. In the most recent election, the CDU/CSU received the vote of 26.1% of the electorate in the West, but only 19.8% in the East (including Berlin). Similarly, the SPD received 16.7% in the West, but just 10.6% in the East. Conversely, the Left party, with its historic ties to the onceruling party in the East, polled at 12.5% of the electorate in this part of the country, compared to just 5.5% in the West. The AfD showed a similar Eastern slant in its support, receiving votes from 14.9% of the electorate in the East, but only from 8.1% in the West. Therefore, the most outspoken "populist" forces at both ends of the political spectrum find their strongest bases of support in the former GDR, where reconversion from a command economy to liberal capitalism has caused significant economic upheaval and, in some areas, a severe decline. It is probable that this traumatic process has outweighed any role played by the metropoles-periphery divide in shaping Germany's voting patterns.

To avoid this potential confounder, I replicate the analysis considering only the original territory of the FRG, thus focusing on the part of the country with a longstanding experience with liberal democracy and a market economy. Figure 4.19 below displays the share of the variance in parties' voting patterns in this part of the country that can be explained through the metropoles-periphery divide. The patterns that emerge are strikingly different from those identified in Figure 4.16, meaning that the East-West divide was indeed an important source of bias in the analysis. However, while these patterns are different, they come no closer to showing evidence for a realignment. The shares of the variance in parties' electoral results are either stable or experience only short-term fluctuations over time. Notably, the divide now explains a significantly higher share of the CDU/CSU's geographic patterns. However, while this share is higher overall, it shows no clear sign of increasing, peaking at 22% in both 1994 and 2017 and cratering at 17% in the middle part of the period. In addition, support for the CDU/CSU still does not align with the expectations for a pro-globalization political force, as it still receives its highest levels of support in the most peripheral parts of West Germany. SPD, meanwhile, sees little change in the share of variance in its voting patterns explained by the divide, except for a sudden drop in 2017. The Green party still appears to actively dealign from this divide, while the FDP shows signs of aligning to it in the most recent elections. The PDS, when it competed from 1994 to 2002, saw a high share of its variance in West Germany explained by the divide, but the party was a marginal force in West Germany at the time. Once it reorganized as the Left Party and made inroads in the West, it was largely unaffected by the divide until 2013. Finally, even support for the AfD does not appear to be significantly shaped by the metropoles-periphery divide within West Germany in either 2013 or 2017. Thus, while the East-West divide undoubtedly plays a key role in shaping Germany's political geography, it does not seem to obscure a subtler realignment along the lines of the metropoles-periphery divide.



One last component of Germany's political geography within the original territory of the FRG deserves to be examined as a potential confounder. The Land of Bavaria, in the country's Southeast, has long exhibited idiosyncratic voting patterns. Its politics have long been dominated by the Christian Social Union, a local party which, while closely allied with the national CDU, retains some political autonomy. While the CSU only competes in Bavarian elections, the CDU is typically absent from them, meaning that the Land arguably has its own party system distinct from the rest of the country. The CSU also tends to poll higher in Bavaria than the CDU does in the rest of Germany. Taking the 2017 election again, while 19.8% of the electorate supported the CDU in East Germany, 25.2% did so in the West outside of Bavaria, and 30.1% voted for the CSU in Bavaria. As such, it is possible that the distinctions between Bavaria and the remaining 9 Länder of West Germany might obscure a pattern that would otherwise emerge. To determine if that is the case, I again replicate the above analysis while excluding Bavaria and considering only those 9 Länder. The results of this analysis are displayed in Figure 4.20 below. Overall, the patterns remain largely unchanged compared to those of Figure 4.19. The share of the geographic variance in each party's electoral support that is explained by the metropoles-periphery divide appears slightly lower across the board, but

the relative placement of each party remains largely the same. The CDU still sees a high share of its geographic variance explained by the divide, but with little meaningful evolution over time. Other parties are either unaffected by the divide, or see its effect fluctuate from election to election.



To fully summarize the metropoles-periphery divide's role in Germany's electoral geography, I calculate the share of the sum of the variances of all parties considered in this analysis explained by the divide. Figure 4.21 below displays the results of this calculation for each election, first including all of Germany, then just West Germany, and finally the 9 West German *Länder* without Bavaria. Regardless of the geographic extent considered, however, there appears to have been no meaningful change in the prevalence of the metropoles-periphery divide in structuring geographic voting patterns between 1994 and 2017. The share of variance explained does fluctuate from one election to another, but these fluctuations are small in scale, and decreases are as common as increases. Despite significant new developments in Germany's political life over the past decade, we must thus conclude on a null finding for the test of hypothesis (**H2**) in the German context.



Beyond Metropoles and Periphery

The absence of evidence for a realignment along the metropoles-periphery divide raises important questions about the ways in which globalization, geography, and electoral behavior intersect in contemporary developed societies. Chapter 3 has demonstrated that, in general, globalization's "winners" tend to cluster in large metropoles, and its "losers" are concentrated outside of these metropoles. The previous section of this chapter provides strong evidence that this growing chasm has carried political consequences in three major developed countries, leading to a realignment wherein the metropoles-periphery divide increasingly structures voting patterns. And yet, Germany shows no signs of such a realignment, despite the major presence of "populist" forces critical of globalization in its political life. Understanding why that may be the case is crucial to this research project, as it might help delimit a more precise range of application for the metropoles-periphery model. As such, in this section, I examine Germany's political geography in greater depth, in order to gain a more empirically-grounded sense of how globalization may (or may not) have affected it.

To that purpose, I once again turn to the voting patterns of major parties across the more detailed typology of geographic areas. Given that the East-West divide has proven to strongly affect the analysis of German political geography, I now focus on West Germany. Figures 4.22 and 4.23 below show the shares of the electorate garnered by the CDU/CSU and SPD, respectively, across this typology, minus their share across West Germany. While these charts do not reveal the pattern expected of the metropoles-periphery divide, they nevertheless provide valuable insights. As noted before, the CDU/CSU receives its highest shares outside of urban areas with 200,000 inhabitants or more. However, its overrepresentation in these areas has decreased slightly, from 6 percentage points in 2002 to 3 in 2017. Meanwhile, it has gained ground in large metropoles, especially the Rhine-Ruhr area where its share was 8 points lower than average in 2002 but only 4 points in 2017. Its relative gains in this part of the country may have come from the SPD. Initially overrepresented by 7 points in 1994, the SPD has indeed seen its advantage decline to 3 points in 2017. As with other post-industrial areas, the Rhine-Ruhr area seems to be moving away from its historical ties with social democracy and embracing more conservative alternatives. Aside from this relative decline, the SPD has seen little change in the geographic structure of its vote, although an improvement in areas between 500,000 and a million inhabitants is visible since 2002.





Other parties also reveal notable patterns. For example, just as the CDU/CSU seems to have made relative gains in the Rhine-Ruhr area, so has the FDP, and just as the SPD has lost ground there, so has the Green party. This suggests that this area's shift to the right has been generalized, and not limited to the two major parties. Another interesting feature of the Green party's voting pattern is its surprising strength in urban areas with 200,000 to 500,000 inhabitants. In 2017, its share of the electorate in these areas was 2 points higher than West Germany as a whole. Finally, examining the geographic voting patterns of the AfD reveals a surprisingly uniform level of support across types of areas. Figure 4.24 below shows the difference between the AfD's shares of the electorate across this typology and its share of the electorate in West Germany as a whole, during the two elections in which it competed. These variations are small in size, all contained within one percentage point. It is notable that, between 2013 and 2017, the AfD's relative level of support has decreased in urban areas with 2 million inhabitants or more, but increased in areas smaller than 200,000 inhabitants. While this pattern conforms to the metropoles-periphery divide, the trends in mid-sized areas are far less clear, and the small size of the shifts make any extrapolation difficult.



These patterns reveal the complexity of West Germany's political geography, indicating that, while some individual trends may conform to the metropoles-periphery divide, many other factors contribute to this pattern. In this respect, this finding is somewhat consonant with those of Chapter 3, which showed significant anomalies in the socioeconomic structure of Germany's territory. The relatively high prevalence of university graduates (see figure 3.2) and managers and professionals (see figure 3.9) in Germany's mid-sized urban areas might help explain why these areas tend to defy the logic of the metropoles-periphery model.

A "Decentralized" Globalization?

What, therefore, has prevented Germany from experiencing a realignment along the same line of those that affected the party systems of France, the United Kingdom and the United States? A potential answer might lie in the unique degree to which the economic opportunities afforded by globalization are spread across the country's territory, or at least its Western component. One aspect of this dynamic is the common presence of major universities in fairly small urban centers, such as Heidelberg, Göttingen and Freiburg. As discussed, human capital
in the form of a post-secondary education is one of the keys that allow individuals to draw advantages from the economic trends brought forward by globalization. Thus, the even spread of universities across the country's territory might lead to better economic outcomes for Germany's "periphery". In addition, Germany is also notable for its dense network of midsized firms, or *Mittelstand*, which successfully compete at the global level, and appear to be a driver for innovation in the country (Berlemann & Jahn, 2016). This decentralized mode of economic production contrasts with the model of large multinational corporations which traditionally dominate export-oriented economic sectors. One byproduct of the *Mittelstand* might be a lessened pressure to concentrate economic activity in a few large urban poles, allowing smaller cities to draw benefits from globalization.

Fully describing this German model of "decentralized" globalization and understanding its origins is beyond the scope of this research. However, it is notable for directly contradicting the logic of the metropoles-periphery model sketched out by Guilluy and Florida. Given that these authors were describing the economic and political reality in France and the United States, respectively, these findings do not detract to their arguments. These arguments help explain political developments in another country, the United Kingdom, and might prove relevant elsewhere in the developed world. Nevertheless, Germany's example proves that the chasm between metropoles and periphery is not inevitable, and that even a highly globalized country might successfully reduce it.

Conclusion

Over the course of this chapter, I have examined the geographic voting patterns of France, Germany, the United Kingdom and the United States. Of those four countries, three display unambiguous signs of an ongoing realignment which is bringing to the fore a cleavage rooted in the opposition between metropoles and the periphery. This realignment emerges clearly from a decomposition of the geographic variance in electoral outcomes based on a simple, dichotomous distinction between metropoles and periphery. It is further corroborated by an examination of swings in electoral support for specific candidates and parties across a more detailed typology of geographic areas.

For France, the United Kingdom, and the United States, therefore, I can reasonably conclude that (H2) is supported empirically: *within each country, over the course of the observed period, the voting patterns of the largest urban centers and their close suburban rings tend to diverge from those of the rest of their respective country.* The exception to this outcome is Germany, where little if any evidence of a consistent trend toward a rising metropoles-periphery cleavage can be found. Whether examining the whole country or only its historically democratic and free-market Western part, there does not appear to be any notable change in the geographic distribution of voting patterns over time: Germany thus remains "the dog that didn't bark", placing a significant caveat on an otherwise successful test of (H2). This null finding might result from methodological limitations, such as the difficulty of measuring the precise geographic extent of urban areas. However, it might also point toward a more fundamental peculiarity of Germany's socioeconomic structure, namely the decentralization of the economic opportunities offered by globalization. Investigating this possibility, and whether it might apply to other developed countries, will require further research.

In the countries in which a realignment is occurring, it is not clear whether or not its pacing is affected by differences in electoral systems. The United Kingdom and the United States, despite employing the same first-past-the-post system, show some notable differences in this respect, with realignment unfolding gradually in the former but emerging in distinct steps in the latter. France, with its two-round voting system, combines elements of the two: first-round results show a gradual progression of the metropoles-periphery cleavage, whereas second-round results see it emerge suddenly and jarringly in 2017. Thus, no strong conclusion can be drawn in this regard. Increasing the sample size with a greater number of countries and a broader variety of electoral systems might provide the necessary leverage for a more conclusive test.

Nevertheless, the validation of (**H2**) in three of the four countries under study provides a solid indication that a realignment is affecting at least a large number of developed countries, bringing to the fore a cleavage opposing metropoles to the periphery. To determine whether this metropoles-periphery cleavage reflects a fundamental divide in society or if it represents merely a proxy for other sociological divides which happen to correlate with geography, however, an additional step is needed. In the following chapter, I take this step by examining data from a recent individual-level electoral survey in the United States in order to ascertain whether geography has an independent effect on voting behavior.

Chapter V

Geographic Divide and Individual Attitudes

The previous chapter has provided clear evidence that the politics of France, the United Kingdom and the United States have undergone a geographic realignment, which increasingly pits the inhabitants of large urban centers against people living in smaller communities. This realignment in turn, can be explained by the findings of Chapter III, which revealed that these two geographic entities differ markedly in their socioeconomic profiles. While the former appears to encompass most of the "winners" from globalization, the latter is home to those most likely to lose out. Taken together, these findings suggest that globalization is driving a wedge in the territories of at least three developed democracies, giving rise to a new political cleavage opposing "metropoles" to the "periphery". However, the nature of this cleavage remains ambiguous. One interpretation is that the metropoles-periphery cleavage is merely a proxy for the socioeconomic divides between "winners" and "losers" from globalization. This

means that geography's role in the realignment an incidental byproduct of the uneven distribution of "winners" and "losers" across a country's territory. An alternative possibility is that geography exerts its own influence on realignment, not merely reflecting the socioeconomic divide between "winners and losers" but reinforcing it. This would mean that inhabitants of a country's metropoles might behave differently from residents of the periphery even if their socioeconomic profiles are otherwise identical. This possibility is hinted at in Colantone and Stanig's (2018a, 2018b) findings, as well as in more qualitative studies such as Cramer's (2016). In this final chapter, I examine this possibility by testing hypothesis (H3), which states that *in the most recent elections, voters who live in the largest urban centers and their close suburban rings differ systematically and significantly in their political attitudes and behaviors from those who do not, even after controlling for individual socioeconomic characteristics.*

In order to test this hypothesis, I analyze data from a public opinion survey recently conducted in the United States whose methodology is uniquely suited to this particular research question. Owing to its large sample size and its precise geographic identification of respondents, the Nationscape survey makes it possible to measure the impact of the metropoles-periphery divide at the individual level. Since no comparable data exists for the other countries under study, the analysis in this chapter is limited to the United States. Although its findings should therefore not be interpreted as evidence for the external validity of **(H3)**, they will nevertheless provide an important initial test for its plausibility. If successful, this test should encourage further data collection and research on the subject across developed democracies.

I begin this chapter by providing an overview of the Nationscape data. This overview includes a discussion of its scope and methodology, as well as a focus on the main variables of interest. Using a unique dataset matching each respondent to a specific Metropolitan Statistical Area, I construct a dichotomous variable reflecting the metropoles-periphery divide, similar to the one used in Chapter IV. I also briefly discuss a number of control variables used to isolate the independent effect of geography. In the subsequent section, I introduce the statistical models that I construct in order to identify this effect. I use a logistic regression to estimate the effect of the metropoles-periphery divide, under varying model specifications, on a set of behavioral and attitudinal patterns ranging from partisan identification to recalled voting choice, future voting intentions, and presidential approval ratings. Finally, I present and discuss the findings of these analyses, using them to develop a comprehensive assessment of the effect of the metropoles-periphery divide on political attitudes and behaviors in the United States. I find that this effect is both highly significant on a statistical level and important on a substantive level, thus providing confirmation for (**H3**) in the United States.

The Nationscape Survey

Nationscape is a far-reaching survey project designed by the Democracy Fund Voter Study Group and the University of California, Los Angeles and carried out by LUCID Inc. Its extensive sample size and novel methodology allow it to push the boundaries of public opinion research in the United States, and prove uniquely suited to the purposes of this study. In this section, I discuss the salient features of this survey. I first examine the methodology behind the survey and the characteristics of the sample I analyze. Then, I introduce additional data, not included in the public-release dataset, which maps respondents onto Metropolitan Statistical Areas. This mapping allows me to recreate a dichotomous measure of the metropoles-periphery divide in the United States, following the procedure employed in the previous chapter. Finally, I briefly survey other variables reflecting important political divisions in the United States, which I will use as controls to isolate the effect of the metropoles-periphery divide.

Scope and Methodology

The Nationscape survey consists of an ongoing series of weekly "waves" of interviews, starting on July 18, 2019. Currently, a total of 50 such waves have been made publicly available for study, with the most recent one having been conducted in the week of June 25, 2020. Taken together, these 50 weekly surveys provide a cumulative sample of 318,736 respondents, a considerable sample size allowing for remarkably precise estimates. The surveys are conducted online, employing purposive sampling intended to match a set of demographic quotas based on age, gender, race and ethnicity, census region, income, and education. To further enhance representativeness, respondents are then assigned weights designed to calibrate the sample's demographics on the adult population of the United States as measured in the 2017 American Community Survey. This demographic weighting is based on gender, census region, race, ethnicity, education, age, household language, country of birth, household income, and metropolitan status. Respondents are also weighted based on their vote in the 2016 presidential election, with targets based on the election's results provided by the Federal Elections Commission. Therefore, the Nationscape survey does not aim to collect random samples, a goal rarely attainable in modern public opinion research. Nevertheless, while not random, these samples prove highly successful in accurately representing underlying features of the target population (Tausanovitch et al., 2019).

Mapping Respondents across the Geographic Divide

In addition to its large sample size and high degree of representativeness, the main advantage of the Nationscape survey for the purpose of this research is its high degree of geographic precision. Whereas most surveys of the American public only identify respondents by their State of residence, Nationscape respondents are located based on their ZIP codes, a highly granular territorial subdivision used by the United States Postal Service to organize mail delivery. Given the privacy concerns inherent in such precise geographic information, however, this ZIP code data is not provided in Nationscape's public-release file. Instead, it serves as the basis to assign respondents to a congressional district – that is, the electoral constituency used to elect members of the lower house of the U.S. Congress. There are 435 such districts, in addition to the District of Columbia (which, while not represented in the Congress, takes part in the election of the President and is usually included in analyses of U.S. politics), and they are drawn to have equal populations. As such, they provide a relatively precise overview of the country's territory. However, given that their drawing process is often motivated by political considerations as well as the need to ensure the representation of minority racial groups, Congressional districts often show little regard for the metropolesperiphery divide. They thus prove ill-suited for the type of analysis conducted in this chapter.

However, just as the underlying ZIP code data can be matched to congressional districts, it can similarly be used to associate each respondent to a Metropolitan Statistical Area. Having obtained a dataset that includes such MSA identification,¹ I use it to recreate the dichotomous division between metropoles and periphery used in Chapter IV. As in that chapter, I classify MSAs with over 2 million inhabitants as "metropoles", and the rest of the country as forming

¹ My thanks to Jeffrey Lewis and Lynn Vavreck, of the UCLA Department of Political Science, for compiling this data and making it available to me.

the "periphery". Among the respondents who could be geographically located, residents of the metropoles made up 47% of the weighted sample, and those of the periphery 53%, a ratio slightly off from the 45%-55% breakdown found in the 2015-2019 ACS, but still within reasonable proximity to it.

Control Variables

In order to isolate the impact of the metropoles-periphery divide on respondents' political attitudes, I include in my analysis a number of variables which are also highly likely to influence a person's political outlook. The Nationscape survey includes a high number of such variables, ranging from the most common predictors of political attitudes to more elaborate sociological descriptors. In this section, I provide a brief overview of these variables and their breakdown in the weighted sample.

In analyzing U.S. public opinion, the relevant population is most often broken down in terms of age, gender, racial and ethnic identity, and level of education. These four variables are most commonly used when describing political trends across the country, and feature especially prominently in electoral coverage. All these variables are unsurprisingly present in the Nationscape survey. Respondents' age is coded from 18 (as the sample only includes adults) to 99. The average age of the weighted sample is 47. Regarding gender, the weighted sample is 52% female and 48% male. The Nationscape survey provides an extremely detailed breakdown of race and ethnicity, including not only the standard categories but also a number of more detailed ethnic subgroups. This information is captured by two variables, with the first capturing most racial and ethnic identifiers, while the latter specifically pertains to Hispanic or Latino identity. I recode these two variables into a single one, in order to properly capture the

intersection of these various identities. This produces 18 distinct categories of widely varying sizes. I display the breakdown of the weighted sample across these categories in Figure 5.1 below. Non-Hispanic White Americans constitute 63.5% of it, while the remainder of the sample is split across a multitude of categories, of which the most prominent are Non-Hispanic African-Americans (11.3%) and White Mexicans (6.5%). Finally, educational attainment is crucial in capturing the divide between "winners" and "losers" from globalization, and has emerged as a major predictor of political attitudes in recent years. As such, the Nationscape survey includes a detailed variable measuring a respondent's level of education, ranging from those who have not completed Fourth Grade to the holders of a doctoral degree. Overall, about 32% of the weighted sample only holds a High School degree or lower, while 31% holds a Bachelor's degree or higher.



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The survey also features variables which, while less prominent, are sometimes highly influential in shaping political attitudes in the United States. The inclusion of these variables makes it possible to form a more detailed picture of the American public, and to more precisely isolate the effect of the metropoles-periphery divide. Those variables include many additional markers of socioeconomic status that complement the role of education. Among them is household income, with the median weighted respondent living in a household earning between \$75,000 and \$79,999. The survey also categorizes respondents by their employment status, with 39% of the weighted sample being employed full-time, 9% employed part-time, and 20% retired, among other categories. Respondents were also asked about their membership in a labor union, revealing that only 9% of the weighted sample are current union members, and another 13% have been members at some point in the past. All these variables contribute to sketch a picture of socioeconomic divides in the United States, which must be thoroughly accounted for in order to distinguish them from the metropoles-periphery divide.

Some further variables reflect cultural markers that are highly significant to U.S. politics. Respondents was asked about their religious denomination, and, in a separate question, whether they identify as Evangelical. Recoding these variables as a single one to capture the full range of faith in the United States, we find in the weighted sample 9% of non-Evangelical Protestants, 9% of Evangelical Protestants, 22% of Catholics, 1% of Mormons, 1% of Orthodox Christians, 9% of other non-Evangelical Christians, 12% of other Evangelical Christians, and a variety of non-Christian groups including 3% of Jews, 9% of atheists and agnostics, and 17% who answered "nothing in particular". In addition, the survey distinguishes between respondents born in the United States and those born abroad, a key distinction in the divide over globalization. Overall, 82% of the weighted sample was born in the country, and 18% was not. Sexual orientation is also a variable, with 90% of the weighted sample identifying as heterosexual and 7% identifying as lesbian, gay or bisexual. The survey also asked respondents

whether or not they, or someone in their household, owned a gun. Gun ownership is a major cultural divide in the United States, often causing tension between urban centers and less dense areas. As such, it must be disentangled from the metropoles-periphery divide. Across the weighted sample, 22% of respondents owned a gun, and another 14% lived in a household where someone else did, while 59% were in neither situation. Finally, given the cultural and political distinctiveness of the Southern United States, I also create an indicator for the 14 Southern states identified in the previous chapter. About 35% of the weighted sample lived in these states, while 65% lived in the remaining 36 or in the District of Columbia.

Modeling Political Attitudes and Behavior

Having presented the Nationscape survey and provided an overview of the variables within it which play a major role in shaping political divides in the United States, I now delve into the empirical analysis of these divides. To that end, I build a series of models designed to explain a wide range of attitudes and behaviors among survey respondents. I first describe the salient features of the logistic regression, which forms the basis of my empirical approach. I then discuss my selection of independent variables. I specify three models, each of which builds on the previous one by adding further control variables in order to isolate the effect of geography. Finally, I present the five outcome variables to be explained by these models, each of which reflects an important facet of U.S. public opinion at the time of the survey.

The Logistic Regression

Since the dependent variables of interest are survey items, the values they take are based on discrete answer options rather than a continuous range of quantities. This means that linear regression models based on the ordinary-least-squares method provide an inadequate fit for these variables. Instead, I build models based on the logistic regression, a method commonly used to estimate dichotomous variables. Rather than fitting the outcome variable to a straight line, this method uses a logistic curve, which is based on the following function:

$$f(X_i) = \frac{1}{1 + e^{-(\beta_0 + \sum \beta_i X_i)}}$$

Where X_i are the independent variables used to predict the outcome variable, β_i are the slope coefficients corresponding to each of these variables, and is β_0 is the intercept term. For any values of these parameters, the output of this function will always be comprised between 0 and 1, as illustrated in Figure 5.2 besides. This means that it provides an adequate fit for a

variable that can only take two possible values. The outputs can thus be interpreted as representing the predicted probability for a given observation of taking one of the two possible values – or, when examining a group of observations, the predicted share of observations within this group that take this value.



The dependent variables examined in this analysis are not strictly dichotomous in the Nationscape dataset. However, given that United States politics are dominated by two political parties, the underlying goal is to capture individuals' propensity to side with one or the other major party. As such, all of these variables can be recoded into dichotomous variables in a fairly straightforward manner. The categories which do not fit in this binary are excluded from the analysis as detailed below, since they do not shed light on a respondent's preference for one major party over the other. This means that the sample size of the analyses is lower than that of the Nationscape survey, but remains considerably higher than those of most public opinion surveys. The effects measured must be interpreted as effects on the relevant subset of the American public, rather than on the entire adult U.S. population.

The non-random selection of the Nationscape sample poses a challenge to the use of logistic regression. Random sampling is required in order to fulfill the model's assumption of homoskedasticity, meaning the expectation that stochastic variation is evenly distributed across the sample. Violation of this assumption, also known as heteroskedasticity, leads to bias in the estimates of standard errors, and thus in the level of confidence in the results. However, this bias can be corrected by the use of heteroskedasticity-consistent standard errors, which are robust to these conditions and allow for an unbiased assessment of uncertainty. I use the method developed by White (1980) to calculate these standard errors.

Model Selection

Since the purpose of this analysis is to test whether the metropoles-periphery divide exerts an independent effect on political attitudes in the United States, controlling for other variables which shape these attitudes is a crucial component of my empirical approach. To ensure that this is the case, and track the effect that these controls have on the findings, I design three different models. Each of them adds further controls, and therefore provides increasingly accurate estimates of the impact of the metropoles-periphery divide.

I begin with the most basic specification, which only includes the dichotomous variable representing the metropoles-periphery divide along with fixed terms for each of the 50 waves of the Nationscape survey. This formula, Model 1, provides the baseline estimate for the divergence between metropoles and periphery before taking into account potential confounders, and can as such be interpreted as a robustness check on the analysis of Chapter IV. The fixed terms for survey waves are necessary to correct for potential fluctuations in the samples collected or trends in respondents' attitudes over time.

I then introduce the first substantive control variables to begin separating their effects from those of the metropoles-periphery divide. Model 2 builds on Model 1 but adds the four basic demographic indicators described in the previous section: age, gender, race and ethnicity, and educational attainment. All these variables are crucial to the study of political behavior in the U.S., and are likely to substantially affect the analysis. Age is measured in its continuous effect – that is, as the effect of an additional year of age on the dependent variable. The other variables are included as categorical variables, meaning that each possible value taken by the variable is its own fixed term, and their effects on the dependent variable are estimated relative to one another.

Finally, to fully account for all the relevant differences between inhabitants of the metropoles and of the periphery, I build a comprehensive model including the full range of socioeconomic and cultural variables described in the previous section. In addition to the variables of Model 2, Model 3 thus further adds household income, employment status, union membership, religion, country of birth, sexual orientation, gun ownership, and the distinction

between the South and the rest of the country – all categorical variables – as well as the square of the respondent's age, which captures potential non-linear effects. This final model provides the most conservative test for (**H3**), since it takes into account all the variables available in this dataset which might contribute to the political divide between metropoles and the periphery, isolating the effect of geography itself. The specific variables included in each model are summarized in figure 5.3 below.

Variable Name	Variable Type	Model 1	Model 2	Model 3
Metropoles / Periphery	Dichotomous	Х	Х	Х
Survey Wave Fixed Effects	Categorical	Х	Х	Х
Age	Continuous		Х	Х
Gender	Dichotomous		Х	Х
Race and Ethnicity	Categorical		Х	Х
Educational Attainment	Categorical		Х	Х
Household Income	Categorical			Х
Employment Status	Categorical			Х
Union Membership	Categorical			Х
Religion and Evangelical Status	Categorical			Х
Sexual Orientation	Categorical			Х
Gun Ownership	Categorical			Х
U.S. Born / Foreign-Born	Dichotomous			Х
South / Rest of the Country	Dichotomous			Х
Age (Squared)	Continuous			Х

Figure 5.3: Summary of the Logistic Regression Models

Outcome Variables

Having defined the predictors used in the specification of three different models, I now briefly discuss the outcomes that these models seek to predict. The Nationscape dataset includes a wide range of variables which shed light on major political divides in the United States at the time during which the survey was conducted. I focus my attention on five variables that are particularly indicative of those divides.

Following Campbell et al. (1960), identification to one of the two major parties is seen as a key driver of political attitudes in the United States. If the metropoles-periphery divide plays a major role in shaping U.S. politics, this role should be reflected in respondents' partisan identification. The Nationscape survey provides a 7-point scale of partisan identity, which distinguishes between strong and weak identifiers for both major parties, as well as between independents who lean for one party or the other and those who do not lean either way. To dichotomize this variable, I categorize strong and weak identifiers and as "leaners" according to their preferred party. This results in 44% of the weighted sample being labeled as Democrats and 37% as Republicans. The remaining 20%, which includes "pure" independents as well as respondents who did not answer the relevant question, are excluded from the analysis, leading to an effective sample of 54% of Democrats and 46% of Republicans. As expected, metropoles and periphery differ significantly in their attitudes to the parties: in the former, Democrats made up 60% of this two-party sample, while in the latter, they made up less than 49%.

The Nationscape survey also asked respondents about the vote they cast during the 2016 presidential election, the most recent cycle at the time in which the survey was conducted. This variable is important, as it is the only one measuring an actual electoral choice, rather than a mere expression of attitude or intent. As such, it is particularly useful to examine the role played by the metropoles-periphery divide in shaping this voting decision. However, given that many

U.S. adults do not or cannot vote, analyzing this variable means narrowing the focus to a markedly smaller subset. Overall, about 28% of the weighted sample voted for Hillary Clinton, and 27% for Donald Trump. This leaves out almost 46% of the sample, including 3% who voted for other candidates, 22% who abstained, 16% who were ineligible, and 4% who did not answer the question. This does not detract from the importance of examining this variable, as the subset of individuals who do choose between the major party candidates plays a disproportionate role in structuring the country's political life. Indeed, this subset was the entire focus of the previous chapter's analysis. Of those major-party voters, therefore, 51% chose Clinton and 49% chose Trump. Once again, these patterns differ markedly across the metropoles-periphery divide. 57% of major-party voters in metropoles chose Clinton, whereas only 45% of those in the periphery did so. Notably, these figures somewhat understate the metropoles-periphery divide in the 2016 election, since, based on the previous chapter's analysis, Clinton actually received 61% of the two-party vote in metropoles and 43% in the periphery. This suggests a bias in the sample not fully corrected by the weighting. However, since the direction of this bias would tend toward underestimating the strength of the divide's effect, its presence does not compromise the validity of a test of (H3).

Donald Trump was the president throughout the time during which the survey was conducted. A highly controversial figure, Trump tended to polarize public opinion, and support or opposition to his presidency was a key component of political identity. As such, approval of Donald Trump's presidency constitutes a useful variable through which to examine the role of the metropoles-periphery divide. The Nationscape survey asked its respondents whether they approved or disapproved of "the way Donald Trump is handling his job as President", and further distinguished between weak or strong approval or disapproval. I recode this four-way variable into a dichotomous one distinguishing between respondents who approved and those who disapproved. The vast majority of respondents answered this question, with 41% of the weighted sample indicating approval, 54% disapproval, and 5% failing to answer. As such, this variable captures the widest swath of the original Nationscape sample. Among those who expressed an opinion of Trump's presidency, thus, nearly 57% disapproved of it. As previously, this figure varied considerably across the metropoles-periphery divide. The rate of disapproval among those who expressed an opinion reached a high of 61% among metropolitan respondents, but was just 53% among those who lived in the periphery.

Finally, given that the Nationscape survey was conducted over the course of the long campaign for the 2020 electoral cycle, it is useful to examine how the metropoles-periphery divide might have affected voting intentions. In doing so, I use two different variables, each of which has advantages and drawbacks. First, the survey asked its respondents to choose in a contest between Donald Trump and Joe Biden. Since the survey was largely conducted before Biden secured the Democratic nomination, this contest was a mere hypothetical for most of the respondents in the sample, which may have affected their answer. Nevertheless, only 14% of the weighted sample failed to answer this question, with 49% choosing Biden and 37% picking Trump. In other words, 57% of those who picked a side in this this hypothetical matchup chose Biden. To supplement this variable, I also examine voting intentions for the U.S. House of Representatives. Since these elections have a lower profile that the presidential race, and since the names of individual candidates were not provided, respondents' answer might be taken as a more generic expression of intent to support the candidates of one party or the other in the upcoming cycle. A 40% share of the weighted sample signaled intent to vote for a Democratic candidate to the House, while 33% chose a Republican candidate, and 26% did not answer this prompt. Thus, of those who did answer, 55% chose Democratic candidates. Support for both Biden and Democratic House candidates was again markedly higher in metropoles (62% and 61%, respectively) than in the periphery (52% and 49%, respectively).

The previous sections have laid the groundwork for empirical analysis by selecting the relevant variables and specifying the models used to analyze these variables. In this section, I now turn to examining the findings that these models produce. First, I discuss their statistical significance, leveraging the large sample size to produce point estimates with a high degree of certainty. Then, I provide a substantive measure of the extent to which the metropoles-periphery divide influences each outcome variable, in the form of predicted probabilities. These analyses reveal that the effect of the divide is both significant and large in size, providing confirmation for (**H3**). In a final section, I discuss the potential implications of these findings.

Statistical Significance

Across all three model specifications, the estimated effect of the metropoles-periphery divide on each of the five outcome variables examined is highly statistically significant. Even with the use of heteroskedasticity-consistent standard errors, which tend to increase the estimate of uncertainty, the coefficients representing this effect are unambiguously distinct from zero. Indeed, the P-value of these coefficients, which represents the probability of obtaining these results in the absence of an effect in the underlying population, is infinitesimally low. Figure 5.4 below puts these findings in sharp relief, displaying, for each model and outcome variable, the point estimate of the effect and its confidence interval at a 95% confidence level. Positive values indicate that residents of the metropole are more likely to be drawn to the stated outcome that those of the periphery.



Figure 5.4: Effect of the Metropoles-Periphery Divide on the Following Outcomes

As the figure shows, each coefficient has the expected effect: metropolitan respondents are more likely than peripheral ones to identify as Democrats rather than Republicans, to have voted for Clinton over Trump in 2016, to Disapprove of Trump's presidency, and to intend to vote for Biden and a Democratic House candidate in 2020 rather than Trump and a Republican candidate. This effect is consistently stronger in Model 1, which does not control for other variables that influence political behavior in the United States. However, even when these variables are introduced in the model, the effect persists. The effect of the divide is somewhat weaker in Model 2, which includes the core variables of age, gender, race and ethnicity, and education levels, and weaker still in Model 3, which introduces a wider range of additional controls. Even in Model 3, however, the 95% confidence interval is still comfortably in the positive range, at a safe distance from the zero value that would indicate the possibility of a null finding. Therefore, these analyses indicate that the political attitudes and behaviors of a metropolitan resident are significantly different from those of an inhabitant of the periphery, even when they are otherwise identical across a wide range of demographic, socioeconomic, and cultural characteristics. The statistical significance of these findings is undoubtedly helped by the large size of the Nationscape sample, which allows for estimates far more precise than most public opinion surveys. Nevertheless, this significance is still remarkable given the wide range of control variables included.

Substantive Importance

In addition to being statistically significant, the effect of the metropoles-periphery divide on political attitudes and behavior in the United States is also consequential in its magnitude. Logistic regression coefficients do not lend themselves to an intuitive interpretation, as they map onto a curve of variable slope. One possible approach is to measure how much the coefficient would move a probability away from its midpoint at 0.5. For example, Model 3 estimates that moving from the periphery into a metropole increases a respondent's probability of voting for the Democratic House candidate by 0.1 points on the logistic scale. Based on the shape of the logistic curve, this means that, if a given resident of the periphery had a 50% probability of voting for the Democratic House candidate, an otherwise identical metropolitan resident will have a 52.5% probability of doing so, a major shift given that many elections are decided by a margin of 5 percentage points or less.

However, a more natural approach to estimating the substantive meaning of a logistic regression is to calculate predicted probabilities based on the variables of interest. Predicted probabilities are obtained when employing logistic regression as a predictive tool, using its coefficients to estimate the probability that a given observation will take one of the two possible values of the outcome variable, based on the values of its independent variables. Taking the average predicted probability across a group of observations amounts to calculating the share of that group that the model predicts will take that value. This means that it is possible to

calculate the predicted share of the respondents that will adopt a given political attitude or behavior conditional on whether they are assigned to the metropoles or the periphery. This is the approach that I take in order to illustrate the substantive effect of the metropoles-periphery divide. I first construct two hypothetical samples, both identical to the original Nationscape sample in every respect except that one is entirely located in the periphery, while the other entirely located in the metropoles. Then, for both samples, I calculate the predicted share of respondents who take the "Democratic" position on each of the five outcomes of interest as a percentage of the total number of respondents who take a position. The results of this approach are displayed in Figure 5.5 below, showing, for each outcome, the relevant percentages among the constructed "metropolitan" and "peripheral" samples. As these samples are otherwise identical across the control variables, they provide an opportunity to measure the independent effect of the metropoles-periphery divide.



These predicted probabilities reveal a major substantive impact of the metropolesperiphery divide. Depending on the specific outcome of interest, this impact ranges from 1.7

to 2.1 percentage points, a remarkable difference to be caused solely by geography. Most notably, this analysis reveals that, if the sample of major-party candidate voters in 2016 had been located in the periphery, with all other demographic characteristics held constant, the popular vote would have been tied between Hillary Clinton and Donald Trump. Conversely, if the entire sample had been located in the metropoles, again without altering any demographic variable, Clinton would have won over 52% of the major-party candidate vote, likely enough to prevail in the Electoral College. As noted in the previous section, this projection is probably somewhat underestimated, given that the sample is not fully reflective of the true extent of the geographic divide in 2016 voting patterns. Without this sample bias, the impact of the divide might amount to 3 or 4 percentage points. Regardless, the metropoles-periphery divide emerges as a powerful force contributing to shape the political divides of the United States.

Interpretation

The implications of this finding are considerable. While a growing field of study has emerged around Kriesi et al.'s (2008) framework of a realignment driven by globalization in developed countries, most of this research has focused on the individual-level profile of its "winners" and "losers", or on the policy demands and rhetoric of pro- and anti-globalization political forces. The possibility that geographic location might play a role in shaping these two opposing camps – not merely as a proxy for socioeconomic differences, but as an independent axis of polarization – has received relatively little exploration. An early indication as to the potential of this area of research can be found Colantone and Stanig (2018a, 2018b). Examining first the United Kingdom, then other European countries, these researchers identified a tendency of residents in regions negatively affected by foreign competition to vote for antiglobalization parties or causes even when they didn't appear to be themselves directly affected by it. This chapter provides a broader framework to these findings, in the form of the metropoles-periphery divide, and successfully tests this framework in the context of the United States.

Given these results, further research into this phenomenon across the developed world could bear much fruit. The previous chapter has demonstrated that, similarly to the United States, realignments along the metropoles-periphery divide have also unfolded in France and the United Kingdom. These two countries might therefore prove particularly fertile grounds for an analysis across these lines. This research must contend with the difficulty of collecting samples large enough and identifying respondents' geographic location precisely enough to construct a meaningful measure of the metropoles-periphery divide. However, the Nationscape survey has proven that these difficulties can be overcome, with great benefit. The differences in these countries' institutional structures and party systems provide further methodological challenges. For example, the logistic regression can only predict dichotomous outcomes, which becomes difficult to justify in multi-party systems. A generalization upon it, the multinomial logistic regression, is available, but relies on theoretical assumptions that are rarely met in the analysis of political behavior. On the other hand, such an analysis might help shed light on questions that this research project was not equipped to examine, such as the extent to which the electoral systems which are heavily reliant on geography lead to greater levels of geographic polarization

Further research should also inquire into the origins of this independent geographic effect on individual attitudes and behaviors, in the United States and in any other countries where its presence can be attested. Colantone and Stanig attribute their finding to "sociotropic voting", arguing that voters assess the state of the national economy based on their perception of the economic conditions in their local community. However, this interpretation is difficult

to apply to the findings of this chapter. Evaluations of the state of the economy in the United States tend to be highly fleeting and influenced by partisanship (Enns et al., 2012). As such, it is highly unlikely that they would map consistently and meaningfully into the divide between metropoles and periphery. In addition, both geographic entities tend to be highly diverse in their economic success: as Florida (2017) notes, while metropoles have drawn economic gains from globalization, these gains are built on a foundation of high internal inequality. Overall, these considerations suggest that economic evaluations are likelier to be a byproduct of political cleavages than an explanation for them.

The psychology of political identity formation offers a more promising avenue in explaining the persistent political divergence between metropoles and periphery. Cramer (2016) has documented the formation of a "rural consciousness" in the sparsely-populated areas of Northern Wisconsin. This consciousness ties the political identity of individuals in these areas explicitly to their geographic location, placing them in direct opposition to residents of large cities such as Milwaukee and Madison. Given that political identity is at the core of a political cleavage, a form of this phenomenon, applied to the larger scale of the metropolesperiphery divide, might go a long way toward explaining the findings of this chapter. If individuals, through socialization with their peers, increasingly think of themselves as metropolitan citizens or denizens of the periphery, they are likely to adopt the political outlook that corresponds to each area, even if they are not themselves directly affected by the socioeconomic trends that are driving this geographic rift. It thus becomes crucial to understand how this political identity has emerged, a research agenda which necessitates a combination of qualitative and quantitative research. One step in this agenda might be to develop survey items to consistently test for such a "metropolitan" or "peripheral" identity, in a fashion similar to other political-psychological measures such as authoritarianism.

Conclusion

This chapter has provided evidence suggesting that, far from being a mere proxy for the divide between "winners" and "losers" from globalization, the metropoles-periphery cleavage constitutes its own dimension in structuring political attitudes and behaviors in developed democracies. By examining data from an extensive survey of public opinion conducted in the United States between 2019 and 2020, I am able to isolate the effect of the metropoles-periphery divide from those of other demographic, socioeconomic and cultural variables that often overlap with it. This reveals that, while the majority of the political cleavage that separates metropoles from the periphery is indeed a product of differences across these sociological divisions, a significant portion of it appears to be directly tied to geography.

These findings therefore provide empirical confirmation for (H3): *in the most recent elections, voters who live in the largest urban centers and their close suburban rings differ systematically and significantly in their political attitudes and behaviors from those who do not, even after controlling for individual socioeconomic characteristics.* At this stage, this confirmation only concerns the United States, and cannot be generalized to France, the United Kingdom, or any other developed country. In addition, the underlying drivers of this geographic realignment still deserve to be studied more thoroughly. Nevertheless, this chapter provides the first building block toward a broader research agenda inquiring in the formation of political identity along the metropoles-periphery divide. Within the confines of this research project, identifying the existence of a political divide between metropoles and periphery in the United States that persists when accounting for the effect of individual-level characteristics is an important finding in its own right.

Conclusion

This research project set out to build on the arguments first laid out by Kriesi et al. (2008), suggesting that developed democracies are seeing the axis of their political conflicts realign along an opposition between the "winners" from globalization and its "losers". I have sought to connect this broad theoretical framework to a novel strand of analysis, spearheaded by Guilluy (2014) and Florida (2017), which emphasizes the geographic component of this opposition. Globalization's "winners", among whom are highly educated individuals whose human capital allows them to work in industries and occupations that are advantaged by the international division of labor as well as immigrants who owe their presence to increased international mobility, tend to concentrate in the major urban centers of a given country. The "losers" from globalization, meanwhile – primarily less-educated native workers employed in occupations and industries most vulnerable to international competition – are driven out from these areas due to rising prices and cultural differences, finding their refuge instead in what Guilluy termed the "periphery".

To more comprehensively assess Guilluy and Florida's arguments, and examine their key political implications in light of Kriesi et al.'s framework, I have laid out three hypotheses to guide this research:

(H1) Within each country under study, the largest urban centers and their close suburban rings tend to feature more employment in internationally competitive economic sectors, as well as higher levels of education and a higher share of inhabitants from immigrant background, than the rest of their respective country.

(*H2*) Within each country, over the course of the observed period, the voting patterns of the largest urban centers and their close suburban rings tend to diverge from those of the rest of their respective country.

(H3) In the most recent elections, voters who live in the largest urban centers and their close suburban rings differ systematically and significantly in their political attitudes and behaviors from those who do not, even after controlling for individual socioeconomic characteristics.

(H1) speaks to the sociological, economic and cultural divide between metropoles and periphery, the focus of Guilluy and Florida's work and a necessary precondition to the presence of a political cleavage. More than a single hypothesis, it reflects a set of interconnected claims about the different socioeconomic profiles of each part of the country. (H2) then builds on these arguments to make the central claim of this research: this socioeconomic divide between metropoles and periphery is crystallizing into a political cleavage, and thereby triggering a realignment in the politics of developed democracies. Finally, (H3) takes this argument one step further by positing that this opposition between metropoles and periphery shapes political attitudes and behaviors even beyond the effect of sociological and economic characteristics.

How did these hypotheses fare in empirical analysis? I sought to test them in four major developed democracies of Western Europe and North America: France, Germany, the United Kingdom and the United States. In general, these tests were successful, albeit with notable and substantively important caveats. (H1) found ample empirical confirmation in all four countries, especially in France and the United States. The metropoles-periphery divide in Germany and the United Kingdom presented some interesting peculiarities. The former saw its largest urban area, the Rhine-Ruhr region, exhibit characteristics more akin to the "periphery". The latter, meanwhile, saw only one agglomeration, namely London, truly combine all the characteristics of a metropole. Nevertheless, all four countries' geographic patterns match the broad outline of the metropoles-periphery model. A test of (H2) produced more mixed results. In three of the four countries - France, the United Kingdom, and the United States - I found strong evidence of a realignment underway, with metropoles and periphery increasingly voting in diametrically opposite ways over the past three decades. Germany, however, presents a striking null finding, as no meaningful trend can be identified in its geographic voting patterns. This null finding sheds valuable light on the limits to the metropoles-periphery model, and encourages further study of the peculiar nature of Germany's economic, social and political structure in order to understand which conditions might stave off realignment. Finally, I was able to test (H3) in the specific context of the United States, using a survey whose breadth and precision are rarely found in other countries. This analysis reveals that, even after controlling for a wide range of sociological, economic and cultural characteristics, the effect of the metropoles-periphery divide on individuals' political attitudes and behaviors remains statistically significant and substantively relevant. Lack of adequate survey data limits my ability to generalize this analysis to other countries at this stage. Still, this finding suggests that the emerging cleavage opposing metropoles and periphery might not be driven solely by sociological differences between those two areas, but might involve more complex patterns of political identity formation.

These findings open a number of avenues for future research. On a most basic level, it remains to be seen whether other developed countries beyond the four examined here have undergone a similar realignment. The null finding encountered in analyzing German voting patterns suggests that the metropoles-periphery divide might only become politically salient under certain conditions. Understanding what these conditions are, however, would require a more thorough examination of voting patterns across the developed world. Several countries have the potential to fully test the limits of the metropoles-periphery model. For example, some countries such as Portugal have seen little signs of the rise of "populist" politics that have been the spearhead of anti-globalization sentiment across the developed world. Other countries, such as Italy, have seen the rise of multiple populist parties with varying political positions. Finding out whether a geographic realignment has unfolded in these atypical countries might go a long way toward understanding its reach. In addition to ascertaining the realignment's presence, a wide-ranging analysis of a larger number of countries might also reveal further details about how contextual factors affect its unfolding. The three instances of the realignment observed in this research, for example, were not sufficient to determine the effect of institutional design choices such as electoral rules. Examining smaller countries, rather than the relatively large ones chosen for this research, might also reveal interesting differences, given the former's greater dependence on international trade (Katzenstein 1985). Finally, extending the span of the research is particularly crucial when it comes to determining if the metropoles-periphery divide continues to shape political attitudes and behaviors even after controlling for individuallevel characteristics, as my study of U.S. survey data suggests.

Aside from extending the research to a greater number of countries, another key area of untapped potential for research consists in exploring the causal mechanisms behind the rise of the metropoles-periphery cleavage in greater depth. This research has relied on general models of political identity formation, such as those suggested by social identity theory or Bawn's (1999) game-theoretical approach, to develop an understanding of how voters may develop a political outlook based on their position toward globalization. However, much remains to be understood about the precise psychological mechanisms that lead to this shift in political identity. Especially in light of the finding that socioeconomic and cultural differences alone may not explain the full extent of the chasm between metropoles and periphery in the United States, and may not do so elsewhere either, inquiring further in this direction is crucial. Studies such as Cramer's (2016) provide an early indication of what such a research agenda might look like. Such qualitative, inductive research of this kind would help sketch a more complex portrait of the political self-identity of peripheral residents, and could also stand to be applied to metropolitan ones. As far as quantitative analysis goes, much could be gained from following in the footsteps of authors such as Ballard-Rosa (2018) and Gidron & Hall (2017) to further explore the connection between psychological mechanisms of status anxiety, authoritarianism, and political identity formation.

Overall, the findings from this research remain largely preliminary, and raise far more questions than they can answer. Nevertheless, it has accomplished its crucial task of building a fully articulated theoretical framework that incorporates the insights of Guilluy and Florida into the broader literature on realignment in contemporary developed democracies, and found empirical support for this framework in several such democracies. As such, it is my hope that it might lay the groundwork for a much broader research agenda spanning across the developed world and touching on a variety of fields of study, from political economy to international relations, political sociology, election studies, and political psychology.

Appendix A

Categorization of Urban Areas

This Appendix details, for each country under analysis, the names of the relevant urban areas and their placement into the typologies constructed in Chapter II and used in Chapters III and IV. When the urban areas were based on an existing statistical definition (as in France and the United States) I use that definition. In countries such as Germany and the United Kingdom, where I constructed the typology manually by overlaying a complex urban area's shape onto a map of existing geographic unit, I list which of these units were included into a given urban area. For the United Kingdom, I list the names of constituencies used to define a given urban area for the constituency map used from 1997 to 2005, and then the one in use since 2010.

• "Paris Urban"

• Municipalities in the Urban Unit of Paris.

• "400K-2M Urban"

 Municipalities in the Urban Units of Lyon, Marseille/Aix-en-Provence, Lille (French part), Toulouse, Nice, Bordeaux, Nantes, Toulon, Grenoble, Douai/Lens, Rouen, Strasbourg (French part), Avignon, and Montpellier.

• "150K-400K Urban"

Municipalities in the Urban Units of Saint-Étienne, Béthune, Tours, Valenciennes (French part), Rennes, Metz, Nancy, Orléans, Clermont-Ferrand, Mulhouse, Dijon, Bayonne (French part), Le Havre, Angers, Reims, Le Mans, Perpignan, Brest, Caen, Pau, Chambéry, Nîmes, Limoges, Genève (French part), Annemasse (French part), Dunkerque, Annecy, Amiens, and Saint-Nazaire.

• "<150K Large Urban"

 Municipalities in Urban Units categorized as "Grands pôles" [Large Poles] by the INSEE other than those listed above.

• "Medium / Small Urban"

- Municipalities in Urban Units categorized as "Pôles moyens" [Medium Poles] and "Petits poles" [Small Poles] by the INSEE.
- "Paris Ring"
 - Municipalities in the Urban Area of Paris, but not in the Urban Unit.
- "400K-2M Ring"

 Municipalities in the Urban Areas of Lyon, Marseille/Aix-en-Provence, Lille (French part), Toulouse, Nice, Bordeaux, Nantes, Toulon, Grenoble, Douai/Lens, Rouen, Strasbourg (French part), Avignon, and Montpellier, but not in the corresponding Urban Units.

• "150K-400K Ring"

Municipalities in the Urban Areas of Saint-Étienne, Béthune, Tours, Valenciennes (French part), Rennes, Metz, Nancy, Orléans, Clermont-Ferrand, Mulhouse, Dijon, Bayonne (French part), Le Havre, Angers, Reims, Le Mans, Perpignan, Brest, Caen, Pau, Chambéry, Nîmes, Limoges, Genève (French part), Annemasse (French part), Dunkerque, Annecy, Amiens, and Saint-Nazaire, but not in the corresponding Urban Units.

• "<150K Large Ring"

 Municipalities categorized as "Couronnes des grands pôles" [Rings of the Large Poles] by the INSEE other than those listed above.

• "Medium / Small Rings"

 Municipalities categorized as "Couronnes des pôles moyens" [Rings of the Medium Poles], "Couronnes des petits pôles" [Rings of the Small Poles], and "Autres communes multipolarisées" [Other Multipolarized Municipalities] by the INSEE.

• "Large Multipolar"

 Municipalities categorized as "Communes multipolarisées des grandes aires urbaines" [Multipolarized Municipalities of Large Urban Areas] by the INSEE.

• "Rural"

Municipalities categorized as "Communes isolées hors influence des pôles"
 [Isolated Municipalities Outside the Influence of Poles] by the INSEE.

• "Rhine-Ruhr"

- Ruhrgebiet: Districts of Mönchengladbach (City), Viersen, Krefeld (City), Duisburg (City), Wesel, Mülheim (City), Oberhausen (City), Essen (City), Bottrop (City), Gelsenkirchen (City), Recklinghausen, Herne (City), Bochum (City), Ennepe-Ruhr-Kreis, Hagen (City), Dortmund (City), Unna, and Hamm (City).
- Köln Düsseldorf: Districts of Rhein-Sieg-Kreis, Bonn (City), Rhein-Erft-Kreis, Köln (City), Leverkusen (City), Rheinisch-Bergischer Kreis, Solingen (City), Remscheid (City), Wuppertal (City), Mettmann, Düsseldorf (City), and Rhein-Kreis Neuss.
- "Other >2M"
 - **Berlin:** City-State of Berlin and District of Potsdam.
 - Frankfurt Wiesbaden Darmstadt: Districts of Mainz-Bingen, Mainz (City), Wiesbaden (City), Main-Taunus-Kreis, Groß-Gerau, Darmstadt-Dieburg, Darmstadt (City), Offenbach (Land), Offenbach (City), Frankfurt (City), Hochtaunuskreis, Main-Kinzig-Kreis, Aschaffenburg (Land), and Aschaffenburg (City).
 - Hamburg: City-State of Hamburg and Districts of Stormarn, Segeberg,
 Pinneberg, Stade, and Harburg.
 - Stuttgart: Districts of Stuttgart (City), Esslingen, Böblingen, Ludwigsburg, Rems-Murr-Kreis, and Göppingen.
- München: Districts of München (Land), München (City), Fürstenfeldbruck, Starnberg, Dachau, and Ebersberg.
- "1-2M"
 - Mannheim Ludwigshafen Heidelberg: Districts of Worms (City), Rhein-Pfalz-Kreis, Frankenthal (City), Ludwigshafen (City), Speyer (City), Manheim (City), Heidelberg (City), Rhein-Neckar-Kreis, and Bergstaße.
 - Nürnberg Erlangen: Districts of Schwabach, Nürnberg (Land), Nürnberg (City), Fürth (Land), Fürth (City), Erlangen (Land), and Erlangen (City).
 - Hannover: District of Hannover.
 - **Bremen:** City-State of Bremen and Districts of Delmenhorst (City), Wesermarsch, Osterholz, and Verden.
 - Bielefeld Herford: Districts of Bielefeld (City), Herford, Gütersloh, and Lippe.
- "500K-1M"
 - Saarbrücken Homburg: Districts of Saarlouis, Saarbrücken, Neunkirchen,
 Saarpfalz-Kreis, and Zweibrücken (City).
 - o Dresden: Districts of Dresden (City) and Meißen.
 - Leipzig: Districts of Leipzig (Land) and Leipzig (City).
 - Aachen: District of Aachen.
 - Karlsruhe: Districts of Karlsruhe (Land) and Karlsruhe (City).
 - Augsburg: Districts of Augsburg (Land) and Augsburg (City).
 - Chemnitz: Districts of Chemnitz (City) and Zwickau.
- "200-500K"
 - Koblenz Neuwied: Districts of Koblenz (City), Mayen-Koblenz, and Neuwied.

- Braunschweig: Districts of Braunschweig (City) and Wolfenbüttel.
- Kassel: Districts of Kassel (Land) and Kassel (City).
- Freiburg im Breisgau: Districts of Freiburg im Breisgau (City), Emmendingen, and Breisgau-Hochschwarzwald.
- Kiel: District of Kiel (City).
- Heilbronn: Districts of Heilbronn (Land) and Heilbronn (City).
- Halle Merseburg: District of Halle (City).
- Magdeburg: District of Magdeburg (City).
- Lübeck: District of Lübeck (City).
- Münster: District of Münster (City).
- Ulm Senden: Districts of Ulm (City) and Neu-Ulm.
- **Osnabrück:** District of Osnabrück (City).
- **Reutlingen Tübingen:** Districts of Reutlingen and Tübingen.
- Gießen Wetzlar: District of Gießen.
- Oldenburg: Districts of Oldenburg (City) and Ammerland.
- Siegen: District of Siegen-Wittgenstein.
- **Rostock:** District of Rostock (City).
- **Regensburg:** Districts of Regensburg (Land) and Regensburg (City).
- **Pforzheim:** Districts of Pforzheim (City) and Enzkreis.
- **Erfurt:** District of Erfurt (City).
- Würzburg: Districts of Würzburg (Land) and Würzburg (City).
- "Smaller"
 - All other Districts.

• "London Area"

1997-2005: Constituencies of Barking, Battersea, Beckenham, Bethnal Green 0 and Bow, Bexleyheath and Crayford, Brent East, Brent North, Brent South, Brentford and Isleworth, Bromley and Chislehurst, Camberwell and Peckham, Carshalton and Wallington, Chingford and Woodford Green, Chipping Barnet, Cities of London and Westminster, Croydon Central, Croydon North, Croydon South, Dagenham, Dulwich and West Norwood, Ealing, Acton and Shepherd's Bush, Ealing North, Ealing, Southall, East Ham, Edmonton, Eltham, Enfield North, Enfield, Southgate, Erith and Thamesmead, Feltham and Heston, Finchley and Golders Green, Greenwich and Woolwich, Hackney North and Stoke Newington, Hackney South and Shoreditch, Hammersmith and Fulham, Hampstead and Highgate, Harrow East, Harrow West, Hayes and Harlington, Hendon, Holborn and St Pancras, Hornchurch, Hornsey and Wood Green, Ilford North, Ilford South, Islington North, Islington South and Finsbury, Kensington and Chelsea, Kingston and Surbiton, Lewisham, Deptford, Lewisham East, Lewisham West, Leyton and Wanstead, Mitcham and Morden, North Southwark and Bermondsey, Old Bexley and Sidcup, Orpington, Poplar and Canning Town, Putney, Regent's Park and Kensington North, Richmond Park, Romford, Ruislip-Northwood, Streatham, Sutton and Cheam, Tooting, Tottenham, Twickenham, Upminster, Uxbridge, Vauxhall, Walthamstow, West Ham, Wimbledon, Epsom and Ewell, Esher and Walton, Spelthorne,

Runnymede and Weybridge, Woking, Watford, St. Albans, Broxbourne, Harlow, Dartford, and Gravesham.

- **2010-2019:** Constituencies of Barking, Battersea, Beckenham, Bermondsey 0 and Old Southwark, Bethnal Green and Bow, Bexleyheath and Crayford, Brent Central, Brent North, Brentford and Isleworth, Bromley and Chislehurst, Camberwell and Peckham, Carshalton and Wallington, Chelsea and Fulham, Chingford and Woodford Green, Chipping Barnet, Cities of London and Westminster, Croydon Central, Croydon North, Croydon South, Dagenham and Rainham, Dulwich and West Norwood, Ealing Central and Acton, Ealing North, Ealing Southall, East Ham, Edmonton, Eltham, Enfield North, Enfield Southgate, Erith and Thamesmead, Feltham and Heston, Finchley and Golders Green, Greenwich and Woolwich, Hackney North and Stoke Newington, Hackney South and Shoreditch, Hammersmith, Hampstead and Kilburn, Harrow East, Harrow West, Hayes and Harlington, Hendon, Holborn and St Pancras, Hornchurch and Upminster, Hornsey and Wood Green, Ilford North, Ilford South, Islington North, Islington South and Finsbury, Kensington, Kingston and Surbiton, Lewisham Deptford, Lewisham East, Lewisham West and Penge, Leyton and Wanstead, Mitcham and Morden, Old Bexley and Sidcup, Orpington, Poplar and Limehouse, Putney, Richmond Park, Romford, Ruislip Northwood and Pinner, Streatham, Sutton and Cheam, Tooting, Tottenham. Twickenham, Uxbridge and South Ruislip, Vauxhall, Walthamstow, West Ham, Westminster North, Wimbledon, Epsom and Ewell, Esher and Walton, Spelthorne, Runnymede and Weybridge, Woking, Watford, St. Albans, Broxbourne, Harlow, Dartford, and Gravesham.
- "London Ring"

- 1997-2005: Constituencies of East Surrey, Guildford, Mole Valley, Reigate, South West Surrey, Surrey Heath, Hemel Hempstead, Hertford and Stortford, Hertsmere, Hitchin and Harpenden, North East Hertfordshire, South West Hertfordshire, Stevenage, Welwyn Hatfield, Bracknell, Maidenhead, Reading East, Reading West, Slough, Windsor, Wokingham, Sittingbourne and Sheppey, Faversham and Mid Kent, Maidstone and The Weald, Tunbridge Wells, Tonbridge and Malling, Sevenoaks, Chatham and Aylesford, Gillingham, Medway, Mid Sussex, Horsham, Crawley, Aldershot, Luton North, Luton South, South West Bedfordshire, Beaconsfield, Chesham and Amersham, Wycombe, Aylesbury, Basildon, Billericay, Brentwood and Ongar, Castle Point, Epping Forest, Maldon and East Chelmsford, Rayleigh, Rochford and Southend East, Saffron Walden, Southend West, Thurrock, and West Chelmsford.
- 2010-2019: Constituencies of East Surrey, Guildford, Mole Valley, Reigate, South West Surrey, Surrey Heath, Hemel Hempstead, Hertford and Stortford, Hertsmere, Hitchin and Harpenden, North East Hertfordshire, South West Hertfordshire, Stevenage, Welwyn Hatfield, Bracknell, Maidenhead, Reading East, Reading West, Slough, Windsor, Wokingham, Sittingbourne and Sheppey, Faversham and Mid Kent, Maidstone and The Weald, Tunbridge Wells, Tonbridge and Malling, Sevenoaks, Chatham and Aylesford, Gillingham and Rainham, Rochester and Strood, Mid Sussex, Horsham, Crawley, Aldershot, Luton North, Luton South, South West Bedfordshire, Beaconsfield, Chesham and Amersham, Wycombe, Aylesbury, Epping Forest, Brentwood and Ongar, Saffron Walden, Chelmsford, Maldon, Rayleigh and Wickford,

Rochford and Southend East, Southend West, Castle Point, South Basildon and East Thurrock, Thurrock, Basildon and Billericay.

• "1-3M"

- Manchester
 - 1997-2005: Constituencies of Altrincham and Sale West, Ashton under Lyne, Bolton North East, Bolton South East, Bolton West, Bury North, Bury South, Cheadle, Denton and Reddish, Eccles, Hazel Grove, Heywood and Middleton, Leigh, Makerfield, Manchester, Blackley, Manchester Central, Manchester, Gorton, Manchester, Withington, Oldham East and Saddleworth, Oldham West and Royton, Rochdale, Salford, Stalybridge and Hyde, Stockport, Stretford and Urmston, Worsley, and Wythenshawe and Sale East.
 - 2010-2019: Constituencies of Altrincham and Sale West, Ashton-under-Lyne, Blackley and Broughton, Bolton North East, Bolton South East, Bolton West, Bury North, Bury South, Cheadle, Denton and Reddish, Hazel Grove, Heywood and Middleton, Leigh, Makerfield, Manchester Central, Manchester, Gorton, Manchester, Withington, Oldham East and Saddleworth, Oldham West and Royton, Rochdale, Salford and Eccles, Stalybridge and Hyde, Stockport, Stretford and Urmston, Worsley and Eccles South, and Wythenshawe and Sale East.

o Birmingham

 1997-2005: Constituencies of Aldridge-Brownhills, Birmingham, Edgbaston, Birmingham, Erdington, Birmingham, Hall Green, Birmingham, Hodge Hill, Birmingham, Ladywood, Birmingham, Northfield, Birmingham, Perry Barr, Birmingham, Selly Oak, Birmingham, Sparkbrook and Small Heath, Birmingham, Yardley, Dudley North, Dudley South, Halesowen and Rowley Regis, Solihull, Stourbridge, Sutton Coldfield, Walsall North, Walsall South, Warley, West Bromwich East, West Bromwich West, Wolverhampton North East, Wolverhampton South East, and Wolverhampton South West.

 2010-2019: Constituencies of Aldridge-Brownhills, Birmingham, Edgbaston, Birmingham, Erdington, Birmingham, Hall Green, Birmingham, Hodge Hill, Birmingham, Ladywood, Birmingham, Northfield, Birmingham, Perry Barr, Birmingham, Selly Oak, Birmingham, Yardley, Dudley North, Dudley South, Halesowen and Rowley Regis, Solihull, Stourbridge, Sutton Coldfield, Walsall North, Walsall South, Warley, West Bromwich East, West Bromwich West, Wolverhampton North East, Wolverhampton South East, and Wolverhampton South West.

• Leeds

- 1997-2005: Constituencies of Batley and Spen, Bradford North, Bradford South, Bradford West, Colne Valley, Dewsbury, Halifax, Huddersfield, Keighley, Leeds Central, Leeds East, Leeds North East, Leeds North West, Leeds West, Morley and Rothwell, Normanton, Pudsey, Shipley, and Wakefield.
- 2010-2019: Constituencies of Batley and Spen, Bradford East, Bradford South, Bradford West, Colne Valley, Dewsbury, Halifax, Huddersfield, Keighley, Leeds Central, Leeds East, Leeds North East, Leeds North West, Leeds West, Morley and Outwood, Pudsey, Shipley, and Wakefield.

• "400K-1M"

- Liverpool
 - 1997-2005: Constituencies of Bootle, Knowsley North and Sefton East, Knowsley South, Liverpool, Garston, Liverpool, Riverside, Liverpool, Walton, Liverpool, Wavertree, Liverpool, West Derby, St Helens North, and St. Helens South.
 - 2010-2019: Constituencies of Bootle, Garston and Halewood, Knowsley, Liverpool, Riverside, Liverpool, Walton, Liverpool, Wavertree, Liverpool, West Derby, St Helens North, and St. Helens South and Whiston.

• Southampton

- 1997-2005: Constituencies of Eastleigh, Fareham, Gosport, Havant, Portsmouth North, Portsmouth South, Southampton, Itchen, and Southampton, Test.
- 2010-2019: Constituencies of Eastleigh, Fareham, Gosport, Havant, Portsmouth North, Portsmouth South, Southampton, Itchen, and Southampton, Test.
- Newcastle
 - 1997-2005: Constituencies of Gateshead East and Washington West, Jarrow, Newcastle Upon Tyne Central, Newcastle Upon Tyne East and Wallsend, Newcastle Upon Tyne North, South Shields, Tyne Bridge, Tynemouth, and North Tyneside.
 - 2010-2019: Constituencies of Gateshead, Jarrow, Newcastle Upon Tyne Central, Newcastle Upon Tyne East, Newcastle Upon Tyne North, South Shields, Tynemouth, and North Tyneside.

• Nottingham

- 1997-2005: Constituencies of Amber Valley, Broxtowe, Erewash, Gedling, Nottingham East, Nottingham North, and Nottingham South.
- 2010-2019: Constituencies of Amber Valley, Broxtowe, Erewash, Gedling, Nottingham East, Nottingham North, and Nottingham South.
- \circ Sheffield
 - 1997-2005: Constituencies of Rotherham, Sheffield Central, Sheffield, Attercliffe, Sheffield, Brightside, Sheffield, Hallam, Sheffield, Heeley, and Wentworth.
 - 2010-2019: Constituencies of Rotherham, Sheffield, Brightside and Hillsborough, Sheffield Central, Sheffield, Hallam, Sheffield, Heeley, Sheffield South East, and Wentworth and Dearne.
- o Bristol
 - 1997-2005: Constituencies of Bristol East, Bristol North West, Bristol South, Bristol West, and Kingswood.
 - 2010-2019: Constituencies of Bristol East, Bristol North West, Bristol South, Bristol West, Filton and Bradley Stoke, and Kingswood.
- Leicester
 - 1997-2005: Constituencies of Charnwood, Leicester East, Leicester South, and Leicester West.
 - 2010-2019: Constituencies of Charnwood, Leicester East, Leicester South, and Leicester West.
- Brighton and Hove
 - 1997-2005: Constituencies of Brighton, Kemptown, Brighton, Pavilion, Hove, East Worthing and Shoreham, and Worthing West.

 2010-2019: Constituencies of Brighton, Kemptown, Brighton, Pavilion, Hove, East Worthing and Shoreham, and Worthing West.

• Bournemouth

- 1997-2005: Constituencies of Bournemouth East, Bournemouth West, Christchurch, Mid Dorset and North Poole, and Poole.
- 2010-2019: Constituencies of Bournemouth East, Bournemouth West, Christchurch, Mid Dorset and North Poole, and Poole.

• Cardiff

- 1997-2005: Constituencies of Caerphilly, Cardiff Central, Cardiff North, Cardiff South and Penarth, and Cardiff West.
- 2010-2019: Constituencies of Caerphilly, Cardiff Central, Cardiff North, Cardiff South and Penarth, and Cardiff West.

• "200K-400K"

• Middlesbrough

- 1997-2005: Constituencies of Middlesbrough, Redcar, Stockton North, and Stockton South.
- 2010-2019: Constituencies of Middlesbrough, Redcar, Stockton North, and Stockton South.

• Stoke-on-Trent

- 1997-2005: Constituencies of Stoke-On-Trent North, Stoke-On-Trent Central, Stoke-On-Trent South, and Newcastle-Under-Lyme.
- 2010-2019: Constituencies of Stoke-On-Trent North, Stoke-On-Trent Central, Stoke-On-Trent South, and Newcastle-Under-Lyme.
- Coventry

- 1997-2005: Constituencies of Coventry North East, Coventry South, and Coventry North West.
- 2010-2019: Constituencies of Coventry North East, Coventry South, and Coventry North West.

\circ Sunderland

- 1997-2005: Constituencies of Houghton and Washington East, Sunderland North, Sunderland South, and North Durham.
- 2010-2019: Constituencies of Washington and Sunderland West, Houghton and Sunderland South, Sunderland Central, and North Durham.

o **Birkenhead**

- 1997-2005: Constituencies of Wallasey, Birkenhead, Wirral South, and Ellesmere Port and Neston.
- 2010-2019: Constituencies of Wallasey, Birkenhead, Wirral South, and Ellesmere Port and Neston.

• Kingston upon Hull

- 1997-2005: Constituencies of Kingston upon Hull West and Hessle, Kingston upon Hull East, and Kingston upon Hull North.
- 2010-2019: Constituencies of Kingston upon Hull West and Hessle, Kingston upon Hull East, and Kingston upon Hull North.

• Preston

- **1997-2005:** Constituencies of Preston and Chorley.
- **2010-2019:** Constituencies of Preston and Chorley.
- Newport

- 1997-2005: Constituencies of Newport East, Newport West, Torfaen, and Islwyn.
- 2010-2019: Constituencies of Newport East, Newport West, Torfaen, and Islwyn.

\circ Swansea

- 1997-2005: Constituencies of Swansea West, Swansea East, Neath, and Aberavon.
- 2010-2019: Constituencies of Swansea West, Swansea East, Neath, and Aberavon.

o Derby

- **1997-2005:** Constituencies of Derby South and Derby North.
- 2010-2019: Constituencies of Derby South, Derby North, and Mid Derbyshire.

o **Plymouth**

- 1997-2005: Constituencies of Plymouth, Devonport, Plymouth, Sutton, and South West Devon.
- 2010-2019: Constituencies of Plymouth, Moor View, Plymouth, Sutton and Devonport, and South West Devon.

o Blackpool

- 1997-2005: Constituencies of Blackpool South, Blackpool North and Fleetwood, and Fylde.
- 2010-2019: Constituencies of Blackpool South, Blackpool North and Cleveleys, and Fylde.

• Milton Keynes

- 1997-2005: Constituencies of North East Milton Keynes and Milton Keynes South West.
- 2010-2019: Constituencies of Milton Keynes North and Milton Keynes South.

o **Barnsley**

- 1997-2005: Constituencies of Barnsley East and Mexborough, and Barnsley Central.
- **2010-2019:** Constituencies of Barnsley East and Barnsley Central.

• Northampton

- 1997-2005: Constituencies of Northampton North and Northampton South.
- 2010-2019: Constituencies of Northampton North and Northampton South.

\circ Norwich

- **1997-2005:** Constituencies of Norwich North and Norwich South.
- 2010-2019: Constituencies of Norwich North and Norwich South.

• "Smaller"

• All other constituencies of England and Wales.

• "Over 5M"

Counties in the Metropolitan Statistical Areas of New York City-Newark-Jersey
 City (NY-NJ-PA), Los Angeles-Long Beach-Anaheim (CA), Chicago-Naperville-Elgin (IL-IN-WI), Dallas-Fort Worth-Arlington (TX), Philadelphia-Camden-Wilmington (PA-NJ-DE-MD), Houston-The Woodlands-Sugar Land (TX), Washington-Arlington-Alexandria (DC-VA-MD-WV), Miami-Fort Lauderdale-West Palm Beach (FL), and Atlanta-Sandy Springs-Alpharetta (GA).

- "2M to 5M"
 - Counties in the Metropolitan Statistical Areas of Boston-Cambridge-Newton (MA-NH), San Francisco-Oakland-Berkeley (CA), Detroit–Warren–Dearborn (MI), Riverside-San Bernardino-Ontario (CA), Phoenix-Mesa-Chandler (AZ), Seattle-Tacoma-Bellevue (WA), Minneapolis-St. Paul-Bloomington (MN-WI), San Diego-Chula Vista-Carlsbad (CA), St. Louis (MO-IL), Tampa-St. Petersburg-Clearwater (FL), Baltimore-Columbia-Towson (MD), Denver-Aurora-Lakewood (CO), Pittsburgh (PA), Charlotte-Concord-Gastonia (NC-SC), Portland-Vancouver-Hillsboro (OR-WA), Sacramento-Roseville-Folsom (CA), San Antonio-New Braunfels (TX), Cincinnati (OH-KY-IN), Orlando-Kissimmee-Sanford (FL), Cleveland-Elyria (OH), and Kansas City (MO-KS).
- "1M to 2M"
 - Counties in the Metropolitan Statistical Areas of Las Vegas-Henderson-Paradise (NV), Columbus (OH), Indianapolis-Carmel-Anderson (IN), San Jose-

Sunnyvale-Santa Clara (CA), Austin-Round Rock-Georgetown (TX), Virginia Beach-Norfolk-Newport News (VA-NC), Nashville-Davidson–Murfreesboro– Franklin (TN), Providence-Warwick (RI-MA), Milwaukee-Waukesha (WI), Jacksonville (FL), Memphis (TN-MS-AR), Oklahoma City (OK), Hartford-East Hartford-Middletown (CT), Louisville/Jefferson County (KY-IN), New Orleans-Metairie (LA), Richmond (VA), Buffalo-Niagara Falls (NY), Raleigh-Cary (NC), Salt Lake City (UT), Rochester (NY), and Birmingham-Hoover (AL).

• "Under 1M"

- Counties in all other Metropolitan Statistical Areas not listed above.
- "Non-Metro"
 - All other counties not in a Metropolitan Statistical Area.

Appendix B

Logistic Regression Models

This Appendix includes the complete outputs of the logistic regression models constructed in Chapter V, using heteroskedasticity-consistent standard errors. As detailed in that chapter, I have constructed three different models (termed Model 1, Model 2 and Model 3), each of which adds further control variables to attempt to more precisely estimate the effect of the metropoles-periphery divide. Each of these models is used to estimate five different outcome variables (partisan identification, 2016 presidential vote, approval of Donald Trump, 2020 presidential voting intentions, and 2020 House voting intentions). This adds to a total of 15 regression outputs.

Positive values indicate a greater probability of identifying as a Democrat rather than as a Republicans, while negative values indicate the

opposite.

• Model 1

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	0.013592241	0.05033136	0.27005510	7.871179e-01
metro1	0.419228893	0.01313720	31.91158083	1.844559e-223
wave2	-0.008579705	0.07073897	-0.12128682	9.034639e-01
wave3	-0.057613743	0.06876324	-0.83785674	4.021112e-01
wave4	-0.053369957	0.06972550	-0.76542958	4.440158e-01
wave5	-0.076816840	0.07042935	-1.09069359	2.754077e-01
wave6	-0.036956430	0.06939280	-0.53256869	5.943322e-01
wave7	-0.108565866	0.06955495	-1.56086472	1.185557e-01
wave8	-0.018949580	0.06861950	-0.27615444	7.824294e-01
wave9	-0.020764656	0.07117661	-0.29173429	7.704898e-01
wave10	-0.040189132	0.07126045	-0.56397524	5.727710e-01
wave11	-0.044441103	0.07008519	-0.63410116	5.260148e-01
wave12	-0.028385805	0.07129408	-0.39815095	6.905189e-01
wave13	-0.021089055	0.06961568	-0.30293542	7.619391e-01
wave14	0.030437572	0.07065714	0.43077846	6.666295e-01
wave15	-0.035110843	0.07245214	-0.48460739	6.279549e-01
wave16	-0.079482803	0.07029775	-1.13065928	2.581985e-01
wave17	-0.088583285	0.06805063	-1.30172609	1.930100e-01

wave18	-0.050725686	0.06824760	-0.74325959	4.573245e-01
wave19	-0.118809346	0.07071453	-1.68012642	9.293272e-02
wave20	-0.037437731	0.06931458	-0.54011336	5.891189e-01
wave21	-0.025332315	0.06890984	-0.36761538	7.131600e-01
wave22	-0.043759025	0.07073598	-0.61862471	5.361636e-01
wave23	0.002984953	0.06705665	0.04451390	9.644948e-01
wave24	-0.021824108	0.06291817	-0.34686492	7.286928e-01
wave25	-0.093486654	0.06731258	-1.38884374	1.648803e-01
wave26	0.059138647	0.06775197	0.87286977	3.827341e-01
wave27	-0.004891196	0.06810320	-0.07182036	9.427449e-01
wave28	0.015854999	0.06675460	0.23751172	8.122598e-01
wave29	-0.097174066	0.06882585	-1.41188336	1.579843e-01
wave30	-0.050919536	0.06930494	-0.73471725	4.625117e-01
wave31	-0.042279829	0.06719886	-0.62917476	5.292346e-01
wave32	-0.063517342	0.06640013	-0.95658457	3.387770e-01
wave33	-0.089828067	0.06850432	-1.31127603	1.897645e-01
wave34	-0.032144262	0.06953244	-0.46229158	6.438722e-01
wave35	0.003871741	0.06897722	0.05613072	9.552377e-01
wave36	0.022054596	0.06664800	0.33091159	7.407113e-01
wave37	-0.042573905	0.06544202	-0.65055917	5.153311e-01
wave38	-0.017964066	0.06527530	-0.27520464	7.831590e-01
wave39	-0.079422339	0.06617021	-1.20027342	2.300332e-01
wave40	-0.045674844	0.06643139	-0.68754910	4.917368e-01
wave41	-0.065923663	0.06528825	-1.00973243	3.126235e-01
wave42	-0.059191352	0.06565959	-0.90148835	3.673287e-01
wave43	-0.021714238	0.07051657	-0.30793100	7.581348e-01
wave44	-0.025442043	0.06527797	-0.38974931	6.967219e-01
wave45	-0.019782139	0.06506484	-0.30403733	7.610995e-01
wave46	-0.002314975	0.06528474	-0.03545966	9.717132e-01
wave47	-0.028190436	0.06480207	-0.43502372	6.635452e-01
wave48	-0.063843476	0.06433835	-0.99230826	3.210472e-01
wave49	-0.043529348	0.06519372	-0.66769236	5.043300e-01
wave50	-0.060860963	0.06565268	-0.92701415	3.539192e-01
attr(,"class	5")			
[1] "coeftes	st"			
attr(,"metho	od")			
[1] "z test	of coefficier	its"		
<pre>attr(,"df")</pre>				
[1] Inf				

attr(,"nobs") [1] 260927 attr(,"log∟ik") 'log Lik.' -163277.2 (df=51)

• Model 2

	Estimate Std. Error	z value	Pr(> z)
(Intercept)	0.2233986241 0.1201668987	1.85906957	6.301728e-02
metro1	0.2857249723 0.0142169373	20.09750530	7.759758e-90
wave2	0.0097866983 0.0743022801	0.13171464	8.952100e-01
wave3	-0.0501877893 0.0717705343	-0.69928125	4.843763e-01
wave4	-0.0322827243 0.0730499877	-0.44192648	6.585424e-01
wave5	-0.0535466142 0.0737680419	-0.72587821	4.679134e-01
wave6	-0.0200483020 0.0722939873	-0.27731631	7.815372e-01
wave7	-0.1038662504 0.0718639328	-1.44531821	1.483685e-01
wave8	-0.0156158164 0.0713700524	-0.21880069	8.268053e-01
wave9	-0.0008648211 0.0732518536	-0.01180613	9.905803e-01
wave10	-0.0322019947 0.0753212495	-0.42752868	6.689943e-01
wave11	-0.0522219059 0.0734293240	-0.71118598	4.769690e-01
wave12	-0.0011968641 0.0753570762	-0.01588257	9.873281e-01
wave13	-0.0130147668 0.0732861062	-0.17758846	8.590462e-01
wave14	0.0412445264 0.0733888218	0.56200012	5.741159e-01
wave15	-0.0105329983 0.0754826598	-0.13954196	8.890219e-01
wave16	-0.0686160362 0.0729781624	-0.94022697	3.471012e-01
wave17	-0.0828561928 0.0711330264	-1.16480624	2.440974e-01
wave18	-0.0530190886 0.0713139107	-0.74346068	4.572028e-01
wave19	-0.1307583871 0.0739307954	-1.76865928	7.695075e-02
wave20	-0.0330047623 0.0722301161	-0.45693907	6.477148e-01
wave21	-0.0275893862 0.0718418451	-0.38402948	7.009566e-01
wave22	-0.0317505950 0.0738487904	-0.42994062	6.672388e-01
wave23	0.0107649474 0.0702464504	0.15324543	8.782047e-01
wave24	-0.0056549875 0.0655424989	-0.08627971	9.312441e-01
wave25	-0.0919079716 0.0697797402	-1.31711542	1.877999e-01
wave26	0.0955266242 0.0711303198	1.34298038	1.792783e-01

wave27	0.0180487478 0.0708347297 0.25480083 7.988769e-01
wave28	0.0300181208 0.0695918368 0.43134543 6.662172e-01
wave29	-0.0905903554 0.0717613643 -1.26238341 2.068109e-01
wave30	-0.0463264033 0.0725688739 -0.63837842 5.232274e-01
wave31	-0.0489691890 0.0699029737 -0.70053084 4.835959e-01
wave32	-0.0330271873 0.0690492314 -0.47831361 6.324270e-01
wave33	-0.0895483037 0.0712910286 -1.25609499 2.090815e-01
wave34	-0.0285715539 0.0725514538 -0.39381091 6.937207e-01
wave35	0.0254143420 0.0729634618 0.34831601 7.276029e-01
wave36	0.0293009630 0.0697846281 0.41987704 6.745753e-01
wave37	-0.0385973686 0.0685843141 -0.56277254 5.735898e-01
wave38	-0.0128527187 0.0679270463 -0.18921357 8.499254e-01
wave39	-0.0726354317 0.0695955440 -1.04367934 2.966338e-01
wave40	-0.0468453981 0.0693598030 -0.67539693 4.994236e-01
wave41	-0.0606765475 0.0683730279 -0.88743397 3.748453e-01
wave42	-0.0602867690 0.0694591609 -0.86794554 3.854241e-01
wave43	-0.0178179666 0.0742395673 -0.24000634 8.103253e-01
wave44	-0.0182457729 0.0689203959 -0.26473691 7.912121e-01
wave45	-0.0021800244 0.0685484006 -0.03180270 9.746294e-01
wave46	0.0010205481 0.0682152009 0.01496071 9.880635e-01
wave47	-0.0105125571 0.0672966219 -0.15621226 8.758657e-01
wave48	-0.0583981188 0.0675138362 -0.86498001 3.870498e-01
wave49	-0.0328257754 0.0680176561 -0.48260668 6.293750e-01
wave50	-0.0488232764 0.0683058371 -0.71477458 4.747483e-01
age	-0.0075281301 0.0004179301 -18.01289275 1.543475e-72
genderMale	-0.3983962110 0.0139110569 -28.63881677 2.209208e-180
racehispNon-H. Black	2.2638081182 0.0315524059 71.74755950 0.000000e+00
racehispNon-H. Indian	1.0145244763 0.0693862413 14.62140702 2.051171e-48
racehispNon-H. Chinese	0.7267720333 0.0658311743 11.03993725 2.452044e-28
racehispNon-H. O. Asian	0.6608789652 0.0487256922 13.56325453 6.613530e-42
racehispNon-H. AIAN	0.3271711967 0.0737607731 4.43557168 9.182827e-06
racehispNon-H. NHPI	0.5387075243 0.1431854647
racehispNon-H. Other	0.8814617974 0.0565327210 15.59206388 8.242690e-55
racehispMexican White	0.8376326545 0.0353457326 23.69826831 3.757016e-124
racehispCuban White	0.0389420779 0.0931303952 0.41814574 6.758406e-01
racehispOth. H. White	0.7172814770 0.0455156729 15.75899973 5.956834e-56
racehispMexican Black	1.2709108115 0.1639424437 7.75217682 9.033049e-15
racehispOth. Н. Black	1.5308453804 0.1495337545 10.23745699 1.347311e-24
racehispHisp. Asian	0.4863187775 0.1810486936 2.68612144 7.228681e-03

racehispHisp. AIAN 1.0477847764 0.1898772948 5.51822048 3.424496e-08 racehispHisp. NHPI 0.9528351612 0.2361533587 4.03481520 5.464529e-05 racehispMexican Other 1.3849893047 0.0601643650 23.02009345 2.933122e-117 racehispOth. H. Other 1.1606747406 0.0709440735 16.36041861 3.665992e-60 educationMiddle School - Grades 4 - 8 0.0729685348 0.1588841960 0.45925609 6.460503e-01 educationCompleted some high school -0.0662480939 0.1116556376 -0.59332511 5.529636e-01 educationHigh school graduate -0.0767211591 0.1097021543 -0.69935873 4.843279e-01 educationother post high school vocational training -0.1613874599 0.1119649939 -1.44140998 1.494689e-01 educationCompleted some college, but no degree -0.0508997084 0.1094846634 -0.46490263 6.420012e-01 educationAssociate Degree 0.0153415807 0.1109424510 0.13828413 8.900159e-01 educationCollege Degree (such as B.A., B.S.) 0.0690833524 0.1096378696 0.63010484 5.286260e-01 educationCompleted some graduate, but no degree 0.2298638068 0.1149493678 1.99969614 4.553309e-02 educationMasters degree 0.2021614436 0.1106424047 1.82716061 6.767562e-02 educationDoctorate degree 0.4191747391 0.1177970958 3.55844714 3.730538e-04 attr(,"class") [1] "coeftest" attr(,"method")

• Model 3

attr(,"df")
[1] Inf

attr(,"nobs")
[1] 260927
attr(,"logLik")

[1] "z test of coefficients"

'log Lik.' -149112.5 (df=80)

		z value	PI (> Z)
(Intercept)	1.125296e-01 1.584678e-01	7.101103e-01	4.776357e-01
metro1	8.685878e-02 1.587085e-02	5.472852e+00	4.428507e-08
wave2	-5.610351e-02 7.910122e-02	-7.092622e-01	4.781618e-01
wave3	-8.517463e-02 7.809190e-02	-1.090697e+00	2.754061e-01
wave4	-3.186339e-02 7.932763e-02	-4.016682e-01	6.879282e-01
wave5	-7.131796e-02 7.996589e-02	-8.918548e-01	3.724707e-01
wave6	-7.823770e-02 7.741624e-02	-1.010611e+00	3.122027e-01

Fc+imata

Dn(> |-- |)

-

-1.320863e-01	7.748209e-02	-1.704733e+00	8.824414e-02
-5.036615e-02	7.780069e-02	-6.473741e-01	5.173899e-01
-2.647003e-02	7.966334e-02	-3.322736e-01	7.396827e-01
-2.873566e-02	8.060349e-02	-3.565064e-01	7.214614e-01
-7.252180e-02	7.903965e-02	-9.175370e-01	3.588613e-01
-3.832709e-02	8.156349e-02	-4.699049e-01	6.384229e-01
-3.115167e-02	7.968864e-02	-3.909174e-01	6.958583e-01
7.807145e-03	8.038362e-02	9.712358e-02	9.226283e-01
-1.307809e-02	8.135121e-02	-1.607609e-01	8.722817e-01
-8.458196e-02	7.914742e-02	-1.068663e+00	2.852213e-01
-9.490316e-02	7.672363e-02	-1.236948e+00	2.161063e-01
-7.380460e-02	7.805382e-02	-9.455604e-01	3.443728e-01
-1.477731e-01	8.068497e-02	-1.831482e+00	6.702859e-02
-4.459343e-02	7.804202e-02	-5.714028e-01	5.677266e-01
-6.363902e-02	7.732075e-02	-8.230523e-01	4.104783e-01
-6.775513e-02	7.971061e-02	-8.500139e-01	3.953173e-01
-1.217409e-03	7.670212e-02	-1.587191e-02	9.873366e-01
-1.208124e-02	7.141988e-02	-1.691579e-01	8.656724e-01
-1.291361e-01	7.599308e-02	-1.699314e+00	8.925998e-02
6.674787e-02	7.672974e-02	8.699088e-01	3.843503e-01
-8.605198e-03	7.705189e-02	-1.116806e-01	9.110767e-01
1.098105e-02	7.522508e-02	1.459759e-01	8.839404e-01
-1.012497e-01	7.835280e-02	-1.292229e+00	1.962780e-01
-6.202409e-02	7.926718e-02	-7.824688e-01	4.339391e-01
-4.307097e-02	7.566080e-02	-5.692641e-01	5.691769e-01
-5.026602e-02	7.450407e-02	-6.746748e-01	4.998824e-01
-7.143406e-02	7.653412e-02	-9.333622e-01	3.506330e-01
-5.543425e-02	7.891704e-02	-7.024370e-01	4.824067e-01
-4.071991e-02	7.807085e-02	-5.215764e-01	6.019653e-01
6.452895e-03	7.627922e-02	8.459572e-02	9.325828e-01
-4.694685e-02	7.438303e-02	-6.311500e-01	5.279424e-01
2.019884e-03	7.397678e-02	2.730430e-02	9.782170e-01
-9.180444e-02	7.570486e-02	-1.212662e+00	2.252589e-01
-6.157350e-02	7.643732e-02	-8.055424e-01	4.205068e-01
-7.829737e-02	7.450231e-02	-1.050939e+00	2.932867e-01
-8.412889e-02	7.489415e-02	-1.123304e+00	2.613085e-01
-3.031796e-02	8.108070e-02	-3.739232e-01	7.084614e-01
-2.995055e-02	7.521124e-02	-3.982191e-01	6.904687e-01
-1.459863e-02	7.449936e-02	-1.959564e-01	8.446443e-01
	-1.320863e-01 -5.036615e-02 -2.647003e-02 -2.873566e-02 -7.252180e-02 -3.832709e-02 -3.115167e-02 7.807145e-03 -1.307809e-02 -8.458196e-02 -9.490316e-02 -7.380460e-02 -7.380460e-02 -1.477731e-01 -4.459343e-02 -6.363902e-02 -6.363902e-02 -6.363902e-02 -6.775513e-02 -1.217409e-03 -1.208124e-02 -1.291361e-01 6.674787e-02 -8.605198e-03 1.098105e-02 -1.012497e-01 -6.202409e-02 -4.307097e-02 -5.026602e-02 -7.143406e-02 -5.543425e-02 -4.071991e-02 6.452895e-03 -4.694685e-02 2.019884e-03 -9.180444e-02 -6.157350e-02 -7.829737e-02 -8.412889e-02 -3.031796e-02 -2.995055e-02 -1.459863e-02	-1.320863e-01 7.748209e-02 -5.036615e-02 7.780069e-02 -2.647003e-02 7.966334e-02 -7.252180e-02 7.903965e-02 -3.832709e-02 8.156349e-02 -3.115167e-02 7.968864e-02 7.807145e-03 8.038362e-02 -1.307809e-02 8.135121e-02 -8.458196e-02 7.914742e-02 -9.490316e-02 7.672363e-02 -7.380460e-02 7.805382e-02 -1.477731e-01 8.068497e-02 -4.459343e-02 7.804202e-02 -6.363902e-02 7.732075e-02 -6.363902e-02 7.732075e-02 -6.775513e-02 7.971061e-02 -1.217409e-03 7.670212e-02 -1.208124e-02 7.141988e-02 -1.291361e-01 7.599308e-02 6.674787e-02 7.672974e-02 -8.605198e-03 7.705189e-02 1.098105e-02 7.522508e-02 -1.012497e-01 7.835280e-02 -6.202409e-02 7.926718e-02 -4.307097e-02 7.566080e-02 -5.026602e-02 7.450407e-02 -7.143406e-02 7.653412e-02 -4.071991e-02 7.807085e-02 6.452895e-03 7.627922e-02 -4.694685e-02 7.43803e-02 -2.019884e-03 7.397678e-02 -3.031796e-02 8.108070e-02 -2.995055e-02 7.521124e-02 -1.459863e-02 7.449936e-02	-1.320863e-01 7.748209e-02 -1.704733e+00 -5.036615e-02 7.780069e-02 -6.473741e-01 -2.647003e-02 7.966334e-02 -3.322736e-01 -7.252180e-02 7.903965e-02 -9.175370e-01 -3.832709e-02 8.156349e-02 -4.699049e-01 -3.115167e-02 7.968864e-02 -3.909174e-01 7.807145e-03 8.038362e-02 9.712358e-02 -1.307809e-02 8.135121e-02 -1.607609e-01 -8.458196e-02 7.914742e-02 -1.068663e+00 -9.490316e-02 7.672363e-02 -1.236948e+00 -7.380460e-02 7.805382e-02 -9.455604e-01 -1.477731e-01 8.068497e-02 -1.831482e+00 -4.459343e-02 7.804202e-02 -5.714028e-01 -6.363902e-02 7.732075e-02 -8.230523e-01 -6.775513e-02 7.971061e-02 -8.500139e-01 -1.217409e-03 7.670212e-02 -1.587191e-02 -1.208124e-02 7.141988e-02 -1.691579e-01 -1.291361e-01 7.599308e-02 -1.699314e+00 6.674787e-02 7.525508e-02 -1.292229e+00 -6.202409e-02 7.926718e-02 -7.824688e-01 -4.307097e-02 7.566080e-02 -5.692641e-01 -5.026602e-02 7.450407e-02 -6.746748e-01 -4.307097e-02 7.566080e-02 -5.692641e-01 -5.024609e-02 7.891704e-02 -7.024370e-01 -4.071991e-02 7.807085e-02 -5.215764e-01 -5.543425e-03 7.672922e-02 8.459572e-02 -4.694685e-02 7.480407e-02 -6.746748e-01 -5.543425e-03 7.627922e-02 8.459572e-02 -4.694685e-02 7.480407e-02 -6.311500e-01 2.019884e-03 7.397678e-02 -7.024370e-01 -4.071991e-02 7.807085e-02 -1.212662e+00 -6.157350e-02 7.489415e-02 -1.212662e+00 -6.157350e-02 7.489415e-02 -1.212662e+00 -6.157350e-02 7.489415e-02 -1.22322e-01 -3.031796e-02 8.108070e-02 -3.739232e-01 -2.995055e-02 7.521124e-02 -3.982191e-01 -1.459863e-02 7.449936e-02 -1.2304e+00 -3.031796e-02 8.108070e-02 -3.739232e-01

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wave46	-3.178198e-02 7.438243e-02 -4.272781e-01 6.691768e-01
wave47	-3.474117e-02 7.314438e-02 -4.749670e-01 6.348105e-01
wave48	-9.091506e-02 7.345159e-02 -1.237755e+00 2.158070e-01
wave49	-5.811204e-02 7.372563e-02 -7.882204e-01 4.305678e-01
wave50	-6.138718e-02 7.427505e-02 -8.264844e-01 4.085294e-01
age	-1.067500e-02 3.073950e-03 -3.472731e+00 5.151910e-04
genderMale	-4.656764e-01 1.626031e-02 -2.863885e+01 2.207394e-180
racehispNon-H. Black	2.625392e+00 3.582816e-02 7.327732e+01 0.000000e+00
racehispNon-H. Indian	8.432338e-01 8.832190e-02 9.547279e+00 1.331479e-21
racehispNon-H. Chinese	4.172830e-01 7.100616e-02 5.876715e+00 4.184866e-09
racehispNon-H. O. Asian	5.490108e-01 5.423665e-02 1.012251e+01 4.390289e-24
racehispNon-H. AIAN	4.349614e-01 7.843951e-02 5.545182e+00 2.936483e-08
racehispNon-H. NHPI	6.589627e-01 1.506368e-01 4.374513e+00 1.217040e-05
racehispNon-H. Other	7.761891e-01 6.214118e-02 1.249074e+01 8.387407e-36
racehispMexican White	9.496962e-01 3.863844e-02 2.457905e+01 2.116043e-133
racehispCuban White	9.317322e-02 1.000415e-01 9.313459e-01 3.516747e-01
racehispOth. H. White	7.793289e-01 5.002660e-02 1.557829e+01 1.022539e-54
racehispMexican Black	1.656755e+00 1.985854e-01 8.342780e+00 7.256380e-17
racehispOth. H. Black	1.725102e+00 1.712597e-01 1.007302e+01 7.271182e-24
racehispHisp. Asian	4.410493e-01 2.030341e-01 2.172292e+00 2.983362e-02
racehispHisp. AIAN	1.111630e+00 1.965714e-01 5.655093e+00 1.557622e-08
racehispHisp. NHPI	9.522852e-01 2.565275e-01 3.712215e+00 2.054536e-04
racehispMexican Other	1.424107e+00 6.408242e-02 2.222305e+01 2.056296e-109
racehispOth. H. Other	1.207797e+00 7.570261e-02 1.595450e+01 2.650943e-57
educationMiddle School - Grades 4 - 8	5.872658e-02 1.767018e-01 3.323486e-01 7.396261e-01
educationCompleted some high school	-1.053872e-01 1.250870e-01 -8.425117e-01 3.995016e-01
educationHigh school graduate	-5.597738e-02 1.229312e-01 -4.553553e-01 6.488537e-01
educationOther post high school vocational training	-5.075077e-02 1.253272e-01 -4.049461e-01 6.855171e-01
educationCompleted some college, but no degree	6.928197e-05 1.226635e-01 5.648134e-04 9.995493e-01
educationAssociate Degree	1.273323e-01 1.243104e-01 1.024309e+00 3.056892e-01
educationCollege Degree (such as B.A., B.S.)	1.794594e-01 1.231960e-01 1.456698e+00 1.451997e-01
educationCompleted some graduate, but no degree	3.485958e-01 1.285959e-01 2.710785e+00 6.712405e-03
educationMasters degree	3.483794e-01 1.245194e-01 2.797792e+00 5.145329e-03
educationDoctorate degree	5.403589e-01 1.320228e-01 4.092920e+00 4.259748e-05
southSouth	-2.399639e-01 1.651821e-02 -1.452723e+01 8.144422e-48
agesq	5.640957e-05 3.203818e-05 1.760698e+00 7.828947e-02
foreign_bornAnother country	-4.208745e-02 2.778172e-02 -1.514933e+00 1.297893e-01
relevgProtestant, Evg.	-7.853552e-01 3.211223e-02 -2.445657e+01 4.283923e-132
relevgCatholic, N.E.	7.023379e-02 2.790324e-02 2.517048e+00 1.183427e-02

relevgCatholic, Evg.	-2.621486e-01 4.821749e-02 -5.436795e+00	5.424756e-08
relevgMormon	-1.124147e+00 8.492284e-02 -1.323727e+01	5.345729e-40
relevgOthodox	-2.659141e-02 9.434845e-02 -2.818425e-01	7.780643e-01
relevgOth. Christ., N.E.	-1.133854e-01 3.450322e-02 -3.286226e+00	1.015396e-03
relevgOth. Christ., Evg.	-6.876323e-01 3.215035e-02 -2.138802e+01	1.727481e-101
relevgJewish	6.865541e-01 4.795843e-02 1.431561e+01	1.748238e-46
relevgMuslim	4.945898e-01 7.280107e-02 6.793716e+00	1.092811e-11
relevgBuddhist	5.579204e-01 8.590866e-02 6.494345e+00	8.339564e-11
relevgHindu	2.481845e-01 1.168882e-01 2.123264e+00	3.373175e-02
relevgAtheist	1.450706e+00 4.830109e-02 3.003464e+01	3.465177e-198
relevgAgnostic	1.106918e+00 4.292903e-02 2.578484e+01	1.311704e-146
relevgNothing	5.464687e-01 3.013340e-02 1.813498e+01	1.687574e-73
relevgOther	8.619292e-02 4.474828e-02 1.926173e+00	5.408278e-02
relevgUnknown	-3.257659e-01 2.045064e-01 -1.592938e+00	1.111742e-01
household_income\$15,000 to \$19,999	1.379331e-01 5.676797e-02 2.429770e+00	1.510841e-02
household_income\$20,000 to \$24,999	7.111678e-02 4.910061e-02 1.448389e+00	1.475083e-01
household_income\$25,000 to \$29,999	3.654101e-02 5.105120e-02 7.157718e-01	4.741323e-01
household_income\$30,000 to \$34,999	1.313878e-01 5.022479e-02 2.615994e+00	8.896802e-03
household_income\$35,000 to \$39,999	5.304703e-02 4.722057e-02 1.123388e+00	2.612726e-01
household_income\$40,000 to \$44,999	-2.265563e-02 5.091162e-02 -4.449993e-01	6.563203e-01
household_income\$45,000 to \$49,999	3.995720e-02 4.981225e-02 8.021560e-01	4.224627e-01
household_income\$50,000 to \$54,999	-3.575443e-02 4.613781e-02 -7.749486e-01	4.383701e-01
household_income\$55,000 to \$59,999	-6.237299e-02 5.235414e-02 -1.191367e+00	2.335096e-01
household_income\$60,000 to \$64,999	-1.840292e-02 5.318946e-02 -3.459881e-01	7.293516e-01
household_income\$65,000 to \$69,999	-1.405347e-01 5.313181e-02 -2.645020e+00	8.168604e-03
household_income\$70,000 to \$74,999	-1.001144e-01 5.167901e-02 -1.937235e+00	5.271662e-02
household_income\$75,000 to \$79,999	-1.172086e-01 5.109870e-02 -2.293769e+00	2.180378e-02
household_income\$80,000 to \$84,999	-1.459069e-01 5.462392e-02 -2.671118e+00	7.559913e-03
household_income\$85,000 to \$89,999	-1.109704e-01 5.860802e-02 -1.893434e+00	5.830018e-02
household_income\$90,000 to \$94,999	-1.495156e-01 6.245496e-02 -2.393974e+00	1.666691e-02
household_income\$95,000 to \$99,999	-1.908905e-01 5.162880e-02 -3.697364e+00	2.178498e-04
household_income\$100,000 to \$124,999	-2.686376e-01 4.112085e-02 -6.532880e+00	6.451695e-11
household_income\$125,000 to \$149,999	-1.962973e-01 4.350383e-02 -4.512185e+00	6.416325e-06
household_income\$150,000 to \$174,999	-1.888914e-01 5.028688e-02 -3.756277e+00	1.724599e-04
household_income\$175,000 to \$199,999	-3.493457e-01 5.757385e-02 -6.067784e+00	1.296870e-09
household_income\$200,000 to \$249,999	-3.539468e-01 5.409628e-02 -6.542904e+00	6.033537e-11
household_income\$250,000 and above	-2.829199e-01 5.316708e-02 -5.321335e+00	1.030085e-07
household_incomeUnknown	-5.664562e-02 4.778580e-02 -1.185407e+00	2.358566e-01
employmentHomemaker	-2.110973e-01 3.210450e-02 -6.575318e+00	4.854925e-11

employmentRetired	8.972393e-02	2.859628e-02	3.137608e+00	1.703325e-03
employmentUnemployed or temporarily on layoff	4.891132e-02	3.375081e-02	1.449190e+00	1.472846e-01
employmentPart-time employed	2.245031e-02	2.902895e-02	7.733765e-01	4.392996e-01
employmentPermanently disabled	1.595565e-01	4.254275e-02	3.750498e+00	1.764838e-04
employmentStudent	3.031279e-01	4.375247e-02	6.928245e+00	4.260929e-12
employmentSelf-employed	-1.019395e-01	3.310498e-02	-3.079279e+00	2.075025e-03
employmentOther:	1.235513e-01	8.898319e-02	1.388479e+00	1.649913e-01
employmentUnknown	4.327721e-01	3.774500e-01	1.146568e+00	2.515603e-01
orientation_groupGay man	1.440601e+00	6.987256e-02	2.061755e+01	1.909888e-94
orientation_groupLesbian / gay woman	1.225298e+00	9.249097e-02	1.324776e+01	4.648502e-40
orientation_groupBisexual	5.236294e-01	4.257806e-02	1.229811e+01	9.272395e-35
orientation_groupPrefer not to say	1.233998e-01	6.853395e-02	1.800564e+00	7.177159e-02
orientation_groupOther	2.948844e-01	8.117175e-02	3.632845e+00	2.803133e-04
in_unionI formerly was a member of a labor union	-2.488356e-01	3.358545e-02	-7.409029e+00	1.272272e-13
in_unionNo, I have never been a member of a labor union	-4.306300e-01	2.842644e-02	-1.514892e+01	7.702053e-52
in_unionUnknown	-1.230535e-01	1.258486e-01	-9.777902e-01	3.281781e-01
household_gun_ownerGun Household	4.180973e-01	2.590890e-02	1.613721e+01	1.397222e-58
household_gun_ownerNo Gun	9.075386e-01	1.909591e-02	4.752527e+01	0.000000e+00
household_gun_ownerUnknown	1.616545e-01	4.265538e-02	3.789780e+00	1.507811e-04
attr(,"class")				
[1] "coeftest"				
<pre>attr(,"method")</pre>				
<pre>[1] "z test of coefficients"</pre>				
<pre>attr(,"df")</pre>				
[1] Inf				
attr(,"nobs")				
[1] 260927				
attr(,"logLik")				
'log Lik.' -134287.8 (df=143)				
-				

Positive values indicate a greater probability of having voted for Hillary Clinton rather than for Donald Trump, while negative values

indicate the opposite.

• Model 1

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	-0.1877616152	0.05902563	-3.181018258	1.467584e-03
metro1	0.4673455495	0.01514539	30.857277444	4.474020e-209
wave2	-0.0034393951	0.08362709	-0.041127762	9.671940e-01
wave3	0.0009981680	0.08066770	0.012373824	9.901274e-01
wave4	-0.0097300485	0.08151782	-0.119361003	9.049894e-01
wave5	0.0060002498	0.08267636	0.072575160	9.421442e-01
wave6	-0.0050675288	0.08016864	-0.063210859	9.495986e-01
wave7	-0.0088593342	0.08089073	-0.109522239	9.127883e-01
wave8	-0.0019568588	0.08027204	-0.024377837	9.805512e-01
wave9	-0.0023850545	0.08336743	-0.028608947	9.771765e-01
wave10	-0.0132797606	0.08314288	-0.159722155	8.730999e-01
wave11	0.0086557805	0.08229320	0.105182214	9.162312e-01
wave12	-0.0099471646	0.08362298	-0.118952523	9.053130e-01
wave13	-0.0009820828	0.08094126	-0.012133278	9.903193e-01
wave14	0.0035341455	0.08362729	0.042260671	9.662909e-01
wave15	0.0015351081	0.08549116	0.017956337	9.856737e-01
wave16	-0.0008710751	0.08225676	-0.010589709	9.915508e-01
wave17	0.0116691300	0.07934015	0.147077232	8.830711e-01

wave18	0.0039791254	0.07902606	0.050352064	9.598418e-01
wave19	-0.0003783399	0.08304962	-0.004555589	9.963652e-01
wave20	0.0009976630	0.08092623	0.012328054	9.901639e-01
wave21	-0.0018075856	0.08156791	-0.022160499	9.823199e-01
wave22	-0.0061585034	0.08360870	-0.073658644	9.412820e-01
wave23	-0.0037677570	0.07807945	-0.048255422	9.615127e-01
wave24	0.0019383301	0.07276546	0.026638051	9.787484e-01
wave25	0.0024259686	0.07814466	0.031044586	9.752340e-01
wave26	-0.0043535745	0.07798078	-0.055828811	9.554782e-01
wave27	0.0076325105	0.08005839	0.095336792	9.240473e-01
wave28	0.0215294739	0.07790931	0.276340195	7.822868e-01
wave29	-0.0046602733	0.08056584	-0.057844282	9.538727e-01
wave30	0.0100285237	0.08146917	0.123095941	9.020311e-01
wave31	0.0051884229	0.07866728	0.065954014	9.474144e-01
wave32	0.0118113389	0.07748243	0.152438941	8.788407e-01
wave33	-0.0146511862	0.08051824	-0.181961088	8.556133e-01
wave34	0.0064857543	0.08094458	0.080125865	9.361372e-01
wave35	-0.0077882873	0.08000628	-0.097345946	9.224517e-01
wave36	-0.0037510999	0.07716796	-0.048609553	9.612305e-01
wave37	-0.0023193742	0.07564603	-0.030660886	9.755400e-01
wave38	0.0010050822	0.07548310	0.013315328	9.893762e-01
wave39	-0.0006548971	0.07754033	-0.008445890	9.932612e-01
wave40	0.0064315589	0.07602406	0.084598995	9.325802e-01
wave41	0.0081619222	0.07589618	0.107540625	9.143601e-01
wave42	0.0002844771	0.07558934	0.003763455	9.969972e-01
wave43	0.0033077131	0.08103756	0.040817037	9.674418e-01
wave44	0.0004237298	0.07532888	0.005625064	9.955119e-01
wave45	0.0025110936	0.07411506	0.033881018	9.729720e-01
wave46	0.0129837281	0.07420703	0.174966269	8.611061e-01
wave47	-0.0063612350	0.07431002	-0.085604000	9.317812e-01
wave48	0.0058480131	0.07415697	0.078859926	9.371440e-01
wave49	0.0009602043	0.07488485	0.012822411	9.897695e-01
wave50	0.0030998773	0.07564250	0.040980633	9.673113e-01
attr(,"clas	s")			
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attr(,"meth	od")			
[1] "z test	of coefficient	ts		
attr(,"df")				
LT] INt				
				222

attr(,"nobs") [1] 204880 attr(,"logLik") 'log Lik.' -108387.9 (df=51)

• Model 2

(Intercept) metro1 wave2 wave3 wave4 wave5 wave6 wave7 wave8 wave9 wave10 wave11 wave12 wave13 wave14 wave15 wave16 wave17 wave18 wave19 wave20 wave21 wave22 wave23 wave24 wave25 wave26

Estimate	Std. Error	z value	Pr(> z)
-0.5166860627	0.1620523400	-3.188390e+00	1.430674e-03
0.3347701365	0.0165916922	2.017697e+01	1.560101e-90
-0.0419311401	0.0891914922	-4.701249e-01	6.382658e-01
-0.0186748331	0.0843832197	-2.213098e-01	8.248512e-01
0.0181935101	0.0863163601	2.107771e-01	8.330612e-01
0.0112207763	0.0879322068	1.276071e-01	8.984599e-01
-0.0269289539	0.0849481465	-3.170046e-01	7.512401e-01
-0.0287351550	0.0845755927	-3.397571e-01	7.340395e-01
0.0068349308	0.0846722897	8.072217e-02	9.356629e-01
-0.0018226610	0.0872588653	-2.088798e-02	9.833350e-01
-0.0248232525	0.0882612302	-2.812475e-01	7.785206e-01
-0.0336534902	0.0862001513	-3.904110e-01	6.962326e-01
0.0002839119	0.0888308307	3.196096e-03	9.974499e-01
0.0037556215	0.0861090730	4.361470e-02	9.652115e-01
-0.0007233662	0.0884137141	-8.181607e-03	9.934721e-01
0.0005392983	0.0899564163	5.995106e-03	9.952166e-01
-0.0116411376	0.0866685734	-1.343179e-01	8.931512e-01
-0.0158159640	0.0840740088	-1.881195e-01	8.507829e-01
-0.0047004822	0.0837607563	-5.611795e-02	9.552478e-01
-0.0502510543	0.0874119969	-5.748759e-01	5.653752e-01
0.0076897696	0.0857839261	8.964115e-02	9.285724e-01
-0.0124875116	0.0858129652	-1.455201e-01	8.843002e-01
0.0064319480	0.0877687102	7.328293e-02	9.415810e-01
-0.0211402495	0.0832583960	-2.539113e-01	7.995641e-01
0.0064903172	0.0768942859	8.440571e-02	9.327339e-01
-0.0278490172	0.0819984074	-3.396288e-01	7.341361e-01
0.0218899609	0.0833169528	2.627312e-01	7.927578e-01

wave27	-0.0171000695 0.0856158680 -1.997301e-01 8.416916e-01
wave28	0.0176705197 0.0823307639 2.146284e-01 8.300571e-01
wave29	-0.0345287492 0.0858363545 -4.022625e-01 6.874908e-01
wave30	0.0067154836 0.0865657421 7.757669e-02 9.381648e-01
wave31	-0.0480349833 0.0823073367 -5.836051e-01 5.594860e-01
wave32	0.0258926248 0.0818943559 3.161711e-01 7.518727e-01
wave33	-0.0350208791 0.0850241116 -4.118935e-01 6.804175e-01
wave34	-0.0122404505 0.0854268394 -1.432858e-01 8.860645e-01
wave35	-0.0136366787 0.0855461476 -1.594073e-01 8.733480e-01
wave36	-0.0078451055 0.0811500664 -9.667405e-02 9.229852e-01
wave37	-0.0051270619 0.0798816788 -6.418320e-02 9.488244e-01
wave38	-0.0153221849 0.0791568454 -1.935674e-01 8.465146e-01
wave39	-0.0065295188 0.0821339277 -7.949844e-02 9.366362e-01
wave40	-0.0028582381 0.0795976137 -3.590859e-02 9.713552e-01
wave41	0.0015515813 0.0800543849 1.938159e-02 9.845367e-01
wave42	0.0018365853 0.0795700474 2.308137e-02 9.815854e-01
wave43	-0.0275887910 0.0868588614 -3.176278e-01 7.507673e-01
wave44	0.0073552876 0.0804978667 9.137245e-02 9.271966e-01
wave45	0.0123238755 0.0780643761 1.578681e-01 8.745607e-01
wave46	0.0226291362 0.0781230519 2.896602e-01 7.720762e-01
wave47	0.0104098140 0.0776801352 1.340087e-01 8.933957e-01
wave48	0.0066862169 0.0785263879 8.514612e-02 9.321452e-01
wave49	-0.0000199646 0.0787179838 -2.536219e-04 9.997976e-01
wave50	0.0171541103 0.0793138333 2.162814e-01 8.287684e-01
age	-0.0006677161 0.0005230712 -1.276530e+00 2.017682e-01
genderMale	-0.5176820688 0.0163305609 -3.170020e+01 1.543771e-220
racehispNon-H. Black	2.6631186369 0.0401430079 6.634078e+01 0.000000e+00
racehispNon-H. Indian	1.0274573079 0.0981785698 1.046519e+01 1.248269e-25
racehispNon-H. Chinese	0.8553368412 0.0787574246 1.086040e+01 1.779752e-27
racehispNon-H. O. Asian	0.8173305931 0.0643297175 1.270533e+01 5.523260e-37
racehispNon-H. AIAN	0.1078791807 0.0920202763 1.172341e+00 2.410600e-01
racehispNon-H. NHPI	0.7193087057 0.1753704101 4.101654e+00 4.102077e-05
racehispNon-H. Other	0.8344299690 0.0671948786 1.241806e+01 2.085601e-35
racehispMexican White	0.9262999089 0.0434425591 2.132241e+01 7.034633e-101
racehispCuban White	-0.1030447660 0.1090281281 -9.451209e-01 3.445971e-01
racehispOth. H. White	0.9258807616 0.0551500206 1.678840e+01 2.967231e-63
racehispMexican Black	0.8382721688 0.1818922821 4.608619e+00 4.053530e-06
racehispOth. H. Black	1.6976141140 0.1794942896 9.457761e+00 3.146070e-21
racehispHisp. Asian	0.5163999298 0.2373395085 2.175786e+00 2.957128e-02

racehispHisp. AIAN racehispHisp. NHPI racehispMexican Other racehispOth. H. Other educationMiddle School - Grades 4 - 8 educationCompleted some high school educationHigh school graduate educationCompleted some college, but no degree educationAssociate Degree educationCollege Degree (such as B.A., B.S.) educationCompleted some graduate, but no degree educationMasters degree educationDoctorate degree attr(,"class") [1] "coeftest" attr(,"method") [1] "z test of coefficients" attr(,"df") [1] Inf attr(,"nobs") [1] 204880 attr(,"logLik")

1.2900883251 0.2391781279 5.393839e+00 6.896800e-08 1.3802122986 0.3087334958 4.470562e+00 7.801425e-06 1.7082047568 0.0836500085 2.042086e+01 1.091357e-92 1.5230731407 0.0968169427 1.573147e+01 9.204432e-56 0.5572723998 0.2337410451 2.384144e+00 1.711888e-02 0.1504963874 0.1547951482 9.722294e-01 3.309365e-01 0.0405049295 0.1512380018 2.678224e-01 7.888360e-01 educationother post high school vocational training 0.0453620190 0.1532990359 2.959054e-01 7.673023e-01 0.1516095966 0.1508006821 1.005364e+00 3.147215e-01 0.2503055339 0.1520111781 1.646626e+00 9.963498e-02 0.4434501708 0.1507657753 2.941319e+00 3.268183e-03 0.5395831755 0.1550136262 3.480876e+00 4.997772e-04 0.4989582796 0.1515147736 3.293133e+00 9.907764e-04 0.5656388588 0.1573343441 3.595139e+00 3.242182e-04

• Model 3

'log Lik.' -96864.07 (df=80)

	ESTIMATE STG. Error	z value	Pr(> Z)
(Intercept)	-7.005590e-01 2.318722e-01	-3.021315525	2.516789e-03
metro1	1.162129e-01 1.891206e-02	6.144911148	8.000829e-10
wave2	-7.404837e-02 9.776999e-02	-0.757373151	4.488263e-01
wave3	-6.160242e-02 9.404907e-02	-0.655002915	5.124659e-01
wave4	4.229150e-02 9.583606e-02	0.441290064	6.590030e-01
wave5	2.222398e-02 9.663436e-02	0.229980132	8.181072e-01
wave6	-7.122092e-02 9.336127e-02	-0.762852893	4.455511e-01

-4.673006e-02	9.493432e-02	-0.492235738	6.225527e-01
-6.059558e-02	9.414841e-02	-0.643617712	5.198234e-01
-2.027584e-02	9.704618e-02	-0.208929842	8.345030e-01
2.202814e-02	9.728623e-02	0.226426111	8.208700e-01
-9.049458e-03	9.519692e-02	-0.095060411	9.242668e-01
-1.936214e-02	9.869920e-02	-0.196173263	8.444746e-01
-3.060201e-04	9.540812e-02	-0.003207485	9.974408e-01
3.984450e-02	9.839192e-02	0.404957056	6.855091e-01
-7.681523e-03	9.876802e-02	-0.077773382	9.380083e-01
2.143492e-02	9.604726e-02	0.223170552	8.234028e-01
3.220928e-03	9.412112e-02	0.034221099	9.727008e-01
-8.572313e-02	9.359185e-02	-0.915925197	3.597061e-01
-1.028124e-02	1.003982e-01	-0.102404538	9.184356e-01
2.776178e-02	9.639130e-02	0.288011308	7.733381e-01
-1.860977e-02	9.424224e-02	-0.197467441	8.434618e-01
-2.690591e-02	9.816580e-02	-0.274086361	7.840183e-01
-5.123625e-02	9.317516e-02	-0.549891702	5.823937e-01
2.555420e-02	8.491010e-02	0.300955918	7.634481e-01
-4.022126e-02	9.083655e-02	-0.442787250	6.579196e-01
2.630177e-03	9.241849e-02	0.028459423	9.772957e-01
8.027968e-03	9.498184e-02	0.084521077	9.326421e-01
1.428820e-02	9.189350e-02	0.155486566	8.764377e-01
6.590006e-04	9.647504e-02	0.006830789	9.945499e-01
2.845448e-02	9.752430e-02	0.291768139	7.704639e-01
2.350231e-03	9.207882e-02	0.025524121	9.796369e-01
1.149298e-02	9.005863e-02	0.127616628	8.984524e-01
2.158970e-02	9.281173e-02	0.232618217	8.160579e-01
-7.126852e-03	9.529690e-02	-0.074785769	9.403852e-01
-6.233119e-02	9.356118e-02	-0.666207849	5.052783e-01
-2.139003e-02	9.023797e-02	-0.237040290	8.126255e-01
2.103772e-02	8.821598e-02	0.238479702	8.115091e-01
5.026501e-02	8.875899e-02	0.566308904	5.711838e-01
4.124484e-02	9.199204e-02	0.448352284	6.538990e-01
-1.892605e-03	8.889095e-02	-0.021291309	9.830133e-01
1.501902e-02	8.952677e-02	0.167760056	8.667720e-01
3.331288e-02	8.837509e-02	0.376948760	7.062117e-01
3.098908e-03	9.616278e-02	0.032225653	9.742921e-01
2.848776e-02	8.958161e-02	0.318009076	7.504781e-01
3.069312e-02	8.736038e-02	0.351339169	7.253339e-01

wave7 wave8 wave9 wave10 wave11 wave12 wave13 wave14 wave15 wave16 wave17 wave18 wave19 wave20 wave21 wave22 wave23 wave24 wave25 wave26 wave27 wave28 wave29 wave30 wave31 wave32 wave33 wave34 wave35 wave36 wave37 wave38 wave39 wave40 wave41 wave42 wave43 wave44

wave45

1.071147e-02 8.781387e-02	0.121979213	9.029155e-01
-6.335864e-03 8.685403e-02	-0.072948420	9.418472e-01
-1.323224e-02 8.690403e-02	-0.152262693	8.789797e-01
3.712565e-02 8.769462e-02	0.423351548	6.720388e-01
2.127913e-02 8.973681e-02	0.237128268	8.125573e-01
4.157766e-03 3.961068e-03	1.049657731	2.938755e-01
-5.364278e-01 1.958855e-02	-27.384760720	4.165654e-165
3.155540e+00 4.580637e-02	68.888656330	0.000000e+00
1.028584e+00 1.300008e-01	7.912136663	2.530084e-15
5.571516e-01 9.045264e-02	6.159595452	7.293101e-10
6.828664e-01 7.415285e-02	9.208903503	3.294732e-20
2.192794e-01 9.527716e-02	2.301490100	2.136394e-02
7.628679e-01 1.920570e-01	3.972091474	7.124435e-05
7.740212e-01 7.514520e-02	10.300339982	7.021271e-25
1.042078e+00 4.767845e-02	21.856369397	6.761279e-106
-2.111842e-02 1.217032e-01	-0.173524021	8.622395e-01
1.003082e+00 6.104203e-02	16.432638357	1.116918e-60
1.470408e+00 1.914154e-01	7.681762316	1.569148e-14
2.107716e+00 1.875875e-01	11.235906051	2.716921e-29
3.682976e-01 2.822920e-01	1.304668743	1.920057e-01
1.264768e+00 2.386952e-01	5.298676179	1.166453e-07
1.492301e+00 3.296114e-01	4.527456012	5.969802e-06
1.749743e+00 8.937494e-02	19.577554206	2.402840e-85
1.554089e+00 1.071897e-01	14.498497857	1.238302e-47
5.328220e-01 2.715276e-01	1.962313002	4.972605e-02
2.578537e-02 1.954285e-01	0.131942707	8.950296e-01
-1.134029e-02 1.912206e-01	-0.059304762	9.527094e-01
5.219851e-02 1.932345e-01	0.270130406	7.870599e-01
1.082813e-01 1.907812e-01	0.567568178	5.703282e-01
2.571791e-01 1.920481e-01	1.339139208	1.805254e-01
4.159173e-01 1.909043e-01	2.178668835	2.935628e-02
5.805925e-01 1.949554e-01	2.978078297	2.900619e-03
5.857340e-01 1.917434e-01	3.054781116	2.252248e-03
6.419852e-01 1.975809e-01	3.249227123	1.157190e-03
-2.224987e-01 1.996065e-02	-11.146865780	7.417317e-29
-9.596405e-05 3.956338e-05	-2.425577743	1.528404e-02
-6.102648e-02 3.686097e-02	-1.655585521	9.780578e-02
-1.068893e+00 3.701741e-02	-28.875401835	2.431916e-183
-1.019377e-03 3.115111e-02	-0.032723626	9.738950e-01
	1.071147e-02 8.781387e-02 -6.335864e-03 8.685403e-02 3.712565e-02 8.769462e-02 2.127913e-02 8.973681e-02 4.157766e-03 3.961068e-03 -5.364278e-01 1.958855e-02 3.155540e+00 4.580637e-02 1.028584e+00 1.300008e-01 5.571516e-01 9.045264e-02 6.828664e-01 7.415285e-02 2.192794e-01 9.527716e-02 7.628679e-01 1.920570e-01 7.740212e-01 7.514520e-02 1.042078e+00 4.767845e-02 -2.111842e-02 1.217032e-01 1.003082e+00 6.104203e-02 1.470408e+00 1.914154e-01 2.107716e+00 1.875875e-01 3.682976e-01 2.822920e-01 1.264768e+00 2.386952e-01 1.492301e+00 3.296114e-01 1.749743e+00 8.937494e-02 1.554089e+00 1.071897e-01 5.328220e-01 2.715276e-01 2.578537e-02 1.954285e-01 -1.134029e-02 1.912206e-01 5.219851e-02 1.932345e-01 1.082813e-01 1.907812e-01 2.571791e-01 1.920481e-01 4.159173e-01 1.909043e-01 5.805925e-01 1.949554e-01 5.857340e-01 1.917434e-01 6.419852e-01 1.917434e-01 6.419852e-01 1.975809e-01 -2.224987e-01 1.917434e-01 6.419852e-01 1.975809e-01 -2.224987e-01 1.917434e-01 6.419852e-01 1.975809e-01 -2.224987e-01 1.917434e-01 5.805925e-01 1.949554e-01 5.857340e-01 1.917434e-01 6.419852e-01 1.975809e-01 -2.224987e-01 1.920481e-01 1.02648e-02 3.686097e-02 -9.596405e-05 3.956338e-05 -6.102648e-02 3.686097e-02 -1.068893e+00 3.701741e-02 -1.019377e-03 3.115111e-02	1.071147e-028.781387e-020.121979213-6.335864e-038.685403e-02-0.072948420-1.323224e-028.690403e-020.4233515482.127913e-028.973681e-020.2371282684.157766e-033.961068e-031.049657731-5.364278e-011.958855e-02-27.3847607203.155540e+004.580637e-0268.8886563301.028584e+001.300008e-017.9121366635.571516e-019.045264e-026.1595954526.828664e-017.415285e-029.2089035032.192794e-019.527716e-022.3014901007.628679e-011.920570e-013.9720914747.740212e-017.514520e-0210.300339821.042078e+004.767845e-0218.856369397-2.111842e-021.217032e-01-0.1735240211.003082e+006.104203e-0216.4326383571.470408e+001.914154e-017.6817623162.107716e+001.875875e-0111.2359060513.682976e-012.822920e-011.3046687431.264768e+002.386952e-011.3046687431.264768e+002.9715276e-011.9623130022.578537e-021.952485e-010.31942707-1.134029e-021.92345e-010.5675681782.571791e-011.907812e-010.5675681782.571791e-011.907812e-010.5675681782.571791e-011.909043e-012.9780782975.857340e-011.975809e-013.249227123-2.224987e-011.975809e-013.249227123-2.224987e-011.97580

relevgCatholic, Evg.	-5.885413e-01 5.836673e-02	-10.083506218	6.535160e-24
relevgMormon	-9.599188e-01 9.840667e-02	-9.754611315	1.762746e-22
relevgOthodox	-1.871822e-01 1.146512e-01	-1.632623092	1.025483e-01
relevgOth. Christ., N.E.	-2.016589e-01 4.185795e-02	-4.817697906	1.452240e-06
relevgOth. Christ., Evg.	-9.282893e-01 3.828224e-02	-24.248564207	6.846837e-130
relevgJewish	5.977728e-01 5.191785e-02	11.513821375	1.123856e-30
relevgMuslim	3.100567e-03 8.879274e-02	0.034919149	9.721442e-01
relevgBuddhist	3.901889e-01 1.110263e-01	3.514381148	4.407799e-04
relevgHindu	-3.697069e-01 1.603965e-01	-2.304956344	2.116902e-02
relevgAtheist	1.605837e+00 5.708523e-02	28.130521032	4.148692e-174
relevgAgnostic	1.116553e+00 5.034353e-02	22.178677213	5.517739e-109
relevgNothing	4.981626e-01 3.499967e-02	14.233351284	5.688883e-46
relevgOther	2.902809e-02 5.331997e-02	0.544413164	5.861572e-01
relevgUnknown	-5.367862e-01 2.624914e-01	-2.044967167	4.085810e-02
household_income\$15,000 to \$19,999	-1.883931e-01 8.411374e-02	-2.239741714	2.510770e-02
household_income\$20,000 to \$24,999	-1.685001e-01 7.157569e-02	-2.354153112	1.856496e-02
household_income\$25,000 to \$29,999	-1.690777e-01 7.160925e-02	-2.361115472	1.822006e-02
household_income\$30,000 to \$34,999	4.434155e-03 7.053935e-02	0.062860729	9.498774e-01
household_income\$35,000 to \$39,999	-1.344140e-01 6.523334e-02	-2.060510316	3.934978e-02
household_income\$40,000 to \$44,999	-1.269648e-01 6.870149e-02	-1.848063972	6.459309e-02
household_income\$45,000 to \$49,999	-1.540490e-01 6.847678e-02	-2.249653786	2.447093e-02
household_income\$50,000 to \$54,999	-1.993489e-01 6.285422e-02	-3.171607480	1.515978e-03
household_income\$55,000 to \$59,999	-2.834016e-01 6.984236e-02	-4.057733042	4.955136e-05
household_income\$60,000 to \$64,999	-2.222204e-01 7.100168e-02	-3.129790669	1.749309e-03
household_income\$65,000 to \$69,999	-2.339987e-01 6.930148e-02	-3.376532766	7.340563e-04
household_income\$70,000 to \$74,999	-3.290028e-01 6.767033e-02	-4.861847018	1.162955e-06
household_income\$75,000 to \$79,999	-3.266388e-01 6.725400e-02	-4.856793594	1.193018e-06
household_income\$80,000 to \$84,999	-2.482275e-01 7.057523e-02	-3.517203529	4.361192e-04
household_income\$85,000 to \$89,999	-1.836529e-01 7.390402e-02	-2.485019645	1.295443e-02
household_income\$90,000 to \$94,999	-2.930545e-01 7.897482e-02	-3.710733799	2.066593e-04
household_income\$95,000 to \$99,999	-3.604267e-01 6.753099e-02	-5.337204844	9.439038e-08
household_income\$100,000 to \$124,999	-3.817300e-01 5.782587e-02	-6.601371707	4.073707e-11
household_income\$125,000 to \$149,999	-3.704169e-01 6.021073e-02	-6.152007306	7.650835e-10
household_income\$150,000 to \$174,999	-3.562739e-01 6.603931e-02	-5.394875725	6.857100e-08
household_income\$175,000 to \$199,999	-4.915920e-01 7.316344e-02	-6.719093189	1.828589e-11
household_income\$200,000 to \$249,999	-5.506635e-01 7.013629e-02	-7.851335868	4.116290e-15
household_income\$250,000 and above	-7.149199e-01 6.933391e-02	-10.311259630	6.267441e-25
household_incomeUnknown	-2.545297e-01 6.689935e-02	-3.804667019	1.419951e-04
employmentHomemaker	-2.646956e-01 3.961607e-02	-6.681521396	2.364742e-11

employmentRetired	1.997646e-01	3.206430e-02	6.230126221	4.660595e-10
employmentUnemployed or temporarily on layoff	1.042438e-01	4.522106e-02	2.305205115	2.115509e-02
employmentPart-time employed	1.752420e-02	3.579463e-02	0.489576165	6.244338e-01
employmentPermanently disabled	2.728274e-01	5.167258e-02	5.279925714	1.292363e-07
employmentStudent	3.083523e-01	7.991548e-02	3.858480004	1.140944e-04
employmentSelf-employed	-8.110495e-03	4.053473e-02	-0.200087585	8.414121e-01
employmentOther:	2.062327e-01	1.067658e-01	1.931635541	5.340451e-02
employmentUnknown	6.128412e-01	4.328585e-01	1.415800475	1.568339e-01
orientation_groupGay man	1.589352e+00	7.546164e-02	21.061714858	1.785918e-98
orientation_groupLesbian / gay woman	1.397673e+00	1.162124e-01	12.026883677	2.566669e-33
orientation_groupBisexual	4.023183e-01	5.365829e-02	7.497783713	6.490588e-14
orientation_groupPrefer not to say	1.075055e-01	8.469572e-02	1.269314897	2.043288e-01
orientation_groupOther	2.700542e-01	1.052766e-01	2.565186735	1.031203e-02
in_unionI formerly was a member of a labor union	1.033796e-01	3.746755e-02	2.759177459	5.794706e-03
in_unionNo, I have never been a member of a labor union	-1.017119e-01	3.184864e-02	-3.193603411	1.405090e-03
in_unionUnknown	7.804352e-02	1.468324e-01	0.531514442	5.950623e-01
household_gun_ownerGun Household	5.755910e-01	3.115830e-02	18.473122070	3.398487e-76
household_gun_ownerNo Gun	1.132266e+00	2.247400e-02	50.381148855	0.000000e+00
household_gun_ownerUnknown	-2.549502e-02	5.717194e-02	-0.445935925	6.556435e-01
attr(,"class")				
[1] "coeftest"				
attr(,"method")				
<pre>[1] "z test of coefficients"</pre>				
attr(,"df")				
[1] Inf				
attr(,"nobs")				
[1] 204880				
attr(,"logLik")				
'log Lik.' -84312.21 (df=143)				

Positive values indicate a greater probability of disapproving of Donald Trump rather than approving of him, while negative values indicate

the opposite.

• Model 1

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	0.198120467	0.04632680	4.27658444	1.897826e-05
metro1	0.348977783	0.01219086	28.62618238	3.173478e-180
wave2	-0.052984890	0.06532019	-0.81115638	4.172759e-01
wave3	-0.093782144	0.06347614	-1.47743940	1.395579e-01
wave4	0.022155846	0.06433029	0.34440770	7.305397e-01
wave5	-0.106244146	0.06483988	-1.63856186	1.013045e-01
wave6	-0.038361511	0.06385974	-0.60071507	5.480298e-01
wave7	-0.064693742	0.06428542	-1.00635167	3.142464e-01
wave8	0.006468191	0.06361113	0.10168331	9.190080e-01
wave9	-0.062926687	0.06568059	-0.95807128	3.380268e-01
wave10	-0.056457555	0.06516023	-0.86644196	3.862478e-01
wave11	-0.031784812	0.06474309	-0.49093752	6.234706e-01
wave12	-0.041644150	0.06587097	-0.63220789	5.272510e-01
wave13	0.040924843	0.06392878	0.64016309	5.220666e-01
wave14	-0.008781039	0.06493240	-0.13523356	8.924272e-01
wave15	-0.054193326	0.06649940	-0.81494453	4.151041e-01
wave16	-0.058779289	0.06446042	-0.91186633	3.618391e-01
wave17	-0.094810866	0.06257840	-1.51507323	1.297539e-01

wave18	-0.066186123	0.06316649	-1.04780442	2.947287e-01
wave19	-0.126496330	0.06508876	-1.94344365	5.196258e-02
wave20	-0.044912937	0.06405804	-0.70112882	4.832226e-01
wave21	-0.086797072	0.06346247	-1.36769130	1.714087e-01
wave22	-0.047690067	0.06488098	-0.73503921	4.623156e-01
wave23	-0.024663275	0.06195968	-0.39805363	6.905907e-01
wave24	-0.064990087	0.05794867	-1.12151132	2.620703e-01
wave25	-0.088650042	0.06202698	-1.42921750	1.529417e-01
wave26	-0.030080756	0.06262623	-0.48032197	6.309985e-01
wave27	-0.093289169	0.06303677	-1.47991662	1.388955e-01
wave28	-0.063280120	0.06170220	-1.02557310	3.050929e-01
wave29	-0.130190478	0.06339800	-2.05354230	4.002001e-02
wave30	-0.209145417	0.06396084	-3.26989804	1.075863e-03
wave31	-0.186357426	0.06236738	-2.98805922	2.807552e-03
wave32	-0.143926019	0.06158767	-2.33692919	1.944287e-02
wave33	-0.230330623	0.06311603	-3.64932045	2.629349e-04
wave34	-0.163731006	0.06408584	-2.55487017	1.062274e-02
wave35	-0.151879632	0.06360326	-2.38792220	1.694393e-02
wave36	-0.272489406	0.06175289	-4.41257731	1.021473e-05
wave37	-0.236499090	0.06056085	-3.90514798	9.416775e-05
wave38	-0.234957216	0.06041875	-3.88881270	1.007358e-04
wave39	-0.290882007	0.06107130	-4.76299043	1.907449e-06
wave40	-0.237687341	0.06140622	-3.87073720	1.085067e-04
wave41	-0.130437512	0.06027847	-2.16391541	3.047084e-02
wave42	-0.157188074	0.06096100	-2.57850233	9.922963e-03
wave43	-0.251466890	0.06546373	-3.84131650	1.223762e-04
wave44	-0.129857231	0.06040223	-2.14987487	3.156511e-02
wave45	-0.137255625	0.06023136	-2.27880653	2.267857e-02
wave46	-0.080751869	0.06041396	-1.33664246	1.813394e-01
wave47	0.006822553	0.06006470	0.11358674	9.095654e-01
wave48	-0.029250649	0.05965274	-0.49034880	6.238871e-01
wave49	0.002982077	0.06024244	0.04950127	9.605198e-01
wave50	-0.074090036	0.06067302	-1.22113646	2.220344e-01
attr(,"class	s")			
[1] "coeftes	st"			
<pre>attr(,"methe</pre>	od")			
[1] "z test	of coefficier	nts"		
<pre>attr(,"df")</pre>				
[1] Inf				
attr(,"nobs") [1] 304635 attr(,"logLik") 'log Lik.' -192404.4 (df=51)

• Model 2

	Estimate Std. Error	z value	Pr(> z)
(Intercept)	0.273097101 0.1002826657	2.72327325	6.463857e-03
metro1	0.236681602 0.0130203605	18.17780716	7.736611e-74
wave2	-0.055589082 0.0681569274	-0.81560428	4.147265e-01
wave3	-0.096406502 0.0659808333	-1.46112889	1.439801e-01
wave4	0.033926012 0.0662799586	0.51185928	6.087495e-01
wave5	-0.099579353 0.0672557316	-1.48060769	1.387111e-01
wave6	-0.024627307 0.0662707458	-0.37161656	7.101784e-01
wave7	-0.057032417 0.0662228884	-0.86121911	3.891174e-01
wave8	0.020514360 0.0655211430	0.31309527	7.542083e-01
wave9	-0.058417807 0.0678024897	-0.86158793	3.889143e-01
wave10	-0.055932905 0.0672251261	-0.83202380	4.053955e-01
wave11	-0.026466647 0.0668233217	-0.39606902	6.920541e-01
wave12	-0.024331202 0.0686287540	-0.35453364	7.229390e-01
wave13	0.055269969 0.0659387436	0.83820173	4.019174e-01
wave14	-0.002270331 0.0671293817	-0.03382022	9.730205e-01
wave15	-0.044514599 0.0688150735	-0.64687279	5.177143e-01
wave16	-0.049974350 0.0664426106	-0.75214308	4.519650e-01
wave17	-0.097693995 0.0649343511	-1.50450406	1.324516e-01
wave18	-0.065472827 0.0649241463	-1.00845111	3.132379e-01
wave19	-0.137738671 0.0670660878	-2.05377525	3.999745e-02
wave20	-0.040844626 0.0661803777	-0.61717124	5.371218e-01
wave21	-0.086787394 0.0655166883	-1.32466088	1.852837e-01
wave22	-0.045107912 0.0669113416	-0.67414449	5.002195e-01
wave23	-0.016020251 0.0647494757	-0.24741900	8.045840e-01
wave24	-0.056992916 0.0598537578	-0.95220281	3.409941e-01
wave25	-0.089992039 0.0642414843	-1.40083997	1.612619e-01
wave26	-0.018444842 0.0652573282	-0.28264783	7.774468e-01

wave27	-0.090050715 0.0652604777	-1.37986601 1.676279e-01
wave28	-0.058305788 0.0637355570	-0.91480785 3.602925e-01
wave29	-0.129108158 0.0656083667	-1.96786119 4.908401e-02
wave30	-0.219904900 0.0663946340	-3.31208845 9.260226e-04
wave31	-0.202143032 0.0643899953	-3.13935467 1.693204e-03
wave32	-0.144762514 0.0638272788	-2.26803518 2.332706e-02
wave33	-0.243416674 0.0649922420	-3.74531892 1.801648e-04
wave34	-0.167616599 0.0667596122	-2.51074854 1.204755e-02
wave35	-0.152508618 0.0661633144	-2.30503293 2.116473e-02
wave36	-0.279176687 0.0642597713	-4.34450172 1.395921e-05
wave37	-0.249092967 0.0627440610	-3.96998477 7.187723e-05
wave38	-0.248158547 0.0628254899	-3.94996597 7.816230e-05
wave39	-0.302213775 0.0635920822	-4.75238056 2.010355e-06
wave40	-0.242774586 0.0641999639	-3.78153773 1.558626e-04
wave41	-0.135157059 0.0628648332	-2.14996290 3.155815e-02
wave42	-0.160348816 0.0633571526	-2.53087157 1.137795e-02
wave43	-0.259573233 0.0684393688	-3.79274732 1.489897e-04
wave44	-0.127260968 0.0632863748	-2.01087467 4.433870e-02
wave45	-0.133494410 0.0626061869	-2.13228783 3.298319e-02
wave46	-0.074710431 0.0626578675	-1.19235515 2.331220e-01
wave47	0.023572372 0.0622131477	0.37889695 7.047644e-01
wave48	-0.015443992 0.0618864324	-0.24955375 8.029325e-01
wave49	0.016865450 0.0621989255	0.27115339 7.862731e-01
wave50	-0.068729892 0.0631102816	-1.08904430 2.761344e-01
age	-0.005459571 0.0003833286	-14.24253424 4.988468e-46
genderMale	-0.496863082 0.0126691850	-39.21823544 0.000000e+00
racehispNon-H. Black	1.680676740 0.0254742855	65.97542208 0.000000e+00
racehispNon-H. Indian	0.526794607 0.0597279019	8.81990813 1.145537e-18
racehispNon-H. Chinese	0.947711610 0.0638124181	14.85152323 6.800569e-50
racehispNon-H. O. Asian	0.603223070 0.0450469978	13.39097163 6.828160e-41
racehispNon-H. AIAN	0.161185864 0.0650868414	2.47647390 1.326873e-02
racehispNon-H. NHPI	0.593872905 0.1314593562	4.51754004 6.256220e-06
racehispNon-H. Other	0.744735253 0.0502868498	14.80974164 1.267265e-49
racehispMexican White	0.683735527 0.0322379179	21.20904735 7.879263e-100
racehispCuban White	-0.156352500 0.0871715895	-1.79361763 7.287422e-02
racehispOth. H. White	0.466251504 0.0410581245	11.35588901 6.933104e-30
racehispMexican Black	0.529830609 0.1310120390	4.04413681 5.251625e-05
racehispOth. H. Black	1.076516343 0.1217301130	8.84346787 9.279270e-19
racehispHisp. Asian	0.122736413 0.1558360645	0.78759954 4.309310e-01

racehispHisp. AIAN 1.006132185 0.1629198123 racehispHisp. NHPI 0.617821921 0.2095383043 racehispMexican Other racehispOth. H. Other educationMiddle School - Grades 4 - 8 0.158636661 0.1274514216 educationCompleted some high school 0.113412348 0.0908892213 educationHigh school graduate 0.037138823 0.0893195694 educationOther post high school vocational training -0.022118112 0.0915632694 educationCompleted some college, but no degree 0.184874441 0.0891745101 educationAssociate Degree 0.169039248 0.0906973021 educationCollege Degree (such as B.A., B.S.) 0.304819435 0.0894313554 educationCompleted some graduate, but no degree 0.379143677 0.0952056369 educationMasters degree 0.240862367 0.0905625532 educationDoctorate degree 0.314237734 0.0981681421 attr(,"class") [1] "coeftest" attr(,"method") [1] "z test of coefficients" attr(,"df") [1] Inf

6.17562818 6.590091e-10 2.94849156 3.193289e-03 1.174796981 0.0523058361 22.46015107 1.018413e-111 0.885511038 0.0615109724 14.39598502 5.483798e-47 1.24468334 2.132482e-01 1.24780855 2.121012e-01 0.41579716 6.775584e-01 -0.24156097 8.091204e-01 2.07317585 3.815592e-02 1.86377372 6.235349e-02 3.40841793 6.534074e-04 3.98236585 6.823264e-05 2.65962430 7.822786e-03 3.20101539 1.369442e-03

• Model 3

'log Lik.' -180712.5 (df=80)

attr(,"nobs") [1] 304635 attr(,"logLik")

	Estimate Std. Er	or z value	Pr(> z)
(Intercept)	-0.2507264434 1.313177e-	01 -1.909311821	5.622188e-02
metro1	0.0867211875 1.450663e-	02 5.978037691	2.258415e-09
wave2	-0.0936834133 7.246768e-	02 -1.292761298	1.960936e-01
wave3	-0.1111669952 7.048020e	02 -1.577279812	1.147312e-01
wave4	0.0508233322 7.135802e-	02 0.712230094	4.763223e-01
wave5	-0.0812567651 7.212622e	02 -1.126591169	2.599154e-01
wave6	-0.0476336831 7.075719e	02 -0.673199192	5.008206e-01

-0.0632095154	7.103863e-02	-0.889790687	3.735783e-01
0.0278110765	7.024365e-02	0.395922988	6.921618e-01
-0.0530066472	7.356817e-02	-0.720510627	4.712107e-01
-0.0241027795	7.182347e-02	-0.335583614	7.371849e-01
-0.0006573262	7.188206e-02	-0.009144509	9.927038e-01
-0.0471835240	7.388882e-02	-0.638574582	5.230997e-01
0.0715317560	7.073961e-02	1.011198067	3.119216e-01
-0.0007677898	7.187329e-02	-0.010682547	9.914767e-01
-0.0358138724	7.410584e-02	-0.483280025	6.288969e-01
-0.0246778548	7.170720e-02	-0.344147517	7.307353e-01
-0.0955409629	7.005528e-02	-1.363793818	1.726325e-01
-0.0625347338	7.082663e-02	-0.882926903	3.772758e-01
-0.1155561932	7.262016e-02	-1.591241156	1.115553e-01
-0.0225906173	7.132453e-02	-0.316730002	7.514485e-01
-0.0872373433	7.018183e-02	-1.243019005	2.138608e-01
-0.0459778428	7.167918e-02	-0.641439313	5.212373e-01
-0.0074950771	6.968063e-02	-0.107563279	9.143421e-01
-0.0374130971	6.438198e-02	-0.581111336	5.611654e-01
-0.0929742562	6.965837e-02	-1.334717663	1.819688e-01
-0.0277583400	6.993392e-02	-0.396922405	6.914247e-01
-0.0960461268	7.017113e-02	-1.368741392	1.710801e-01
-0.0644404099	6.818167e-02	-0.945128115	3.445935e-01
-0.1174114193	7.108712e-02	-1.651655272	9.860485e-02
-0.2304330811	7.166016e-02	-3.215637054	1.301553e-03
-0.1900982428	6.952108e-02	-2.734397017	6.249464e-03
-0.1431657389	6.845650e-02	-2.091338723	3.649771e-02
-0.2123260367	6.953035e-02	-3.053717492	2.260248e-03
-0.1799667586	7.211807e-02	-2.495446032	1.257989e-02
-0.1922868603	7.072944e-02	-2.718625331	6.555382e-03
-0.2870547300	6.948299e-02	-4.131295102	3.607251e-05
-0.2459807466	6.692098e-02	-3.675689813	2.372076e-04
-0.2314201898	6.847126e-02	-3.379815031	7.253463e-04
-0.3139160317	6.887085e-02	-4.558039286	5.163338e-06
-0.2547378495	7.027410e-02	-3.624918176	2.890530e-04
-0.1297742595	6.762670e-02	-1.918979550	5.498692e-02
-0.1462867229	6.770356e-02	-2.160694674	3.071893e-02
-0.2478901437	7.337622e-02	-3.378344280	7.292372e-04
-0.1150443173	6.816227e-02	-1.687800646	9.144950e-02
-0.1035231247	6.741978e-02	-1.535500831	1.246609e-01

wave45

wave46	-0.0654505783 6.774312e-02	-0.966158370	3.339649e-01
wave47	0.0572014872 6.701968e-02	0.853502850	3.933805e-01
wave48	0.0047006308 6.679379e-02	0.070375265	9.438950e-01
wave49	0.0602424016 6.729737e-02	0.895167257	3.706977e-01
wave50	-0.0517281847 6.864176e-02	-0.753596416	4.510916e-01
age	-0.0155343821 2.739253e-03	-5.671027746	1.419434e-08
genderMale	-0.5133909405 1.471862e-02	-34.880377400	1.475113e-266
racehispNon-H. Black	2.0167028622 2.877593e-02	70.082987322	0.000000e+00
racehispNon-H. Indian	0.6511415178 7.616632e-02	8.548942415	1.242215e-17
racehispNon-H. Chinese	0.7108288740 6.999252e-02	10.155783574	3.122914e-24
racehispNon-H. O. Asian	0.5668984783 5.028966e-02	11.272665637	1.790652e-29
racehispNon-H. AIAN	0.2403046759 6.744868e-02	3.562778033	3.669509e-04
racehispNon-H. NHPI	0.7368405114 1.363488e-01	5.404085910	6.513972e-08
racehispNon-H. Other	0.7065106335 5.471308e-02	12.913010469	3.801430e-38
racehispMexican White	0.8430530710 3.511131e-02	24.010870868	2.141104e-127
racehispCuban White	-0.0290415244 9.323593e-02	-0.311484244	7.554325e-01
racehispOth. H. White	0.5725690532 4.538331e-02	12.616291307	1.717197e-36
racehispMexican Black	0.9185455741 1.560286e-01	5.887033188	3.931898e-09
racehispOth. H. Black	1.3154748973 1.328935e-01	9.898713696	4.216633e-23
racehispHisp. Asian	0.1930493307 1.845386e-01	1.046119038	2.955061e-01
racehispHisp. AIAN	1.1531806260 1.694027e-01	6.807333763	9.942409e-12
racehispHisp. NHPI	0.7919845968 2.392210e-01	3.310681552	9.306906e-04
racehispMexican Other	1.2981706065 5.640522e-02	23.015077405	3.292812e-117
racehispOth. H. Other	0.9832208118 6.651105e-02	14.782818764	1.890843e-49
educationMiddle School - Grades 4 - 8	0.1120915318 1.385698e-01	0.808917178	4.185628e-01
educationCompleted some high school	0.0699843326 9.911929e-02	0.706061671	4.801498e-01
educationHigh school graduate	0.0646088100 9.726632e-02	0.664246454	5.065326e-01
educationOther post high school vocational training	0.1011729106 9.983604e-02	1.013390677	3.108736e-01
educationCompleted some college, but no degree	0.2449335450 9.719512e-02	2.520018844	1.173486e-02
educationAssociate Degree	0.3057821528 9.895429e-02	3.090135332	2.000653e-03
educationCollege Degree (such as B.A., B.S.)	0.4565992430 9.784404e-02	4.666602612	3.062208e-06
educationCompleted some graduate, but no degree	0.5593273437 1.038523e-01	5.385797876	7.212398e-08
educationMasters degree	0.5028643104 9.929221e-02	5.064488894	4.094975e-07
educationDoctorate degree	0.5721286522 1.070658e-01	5.343709196	9.106362e-08
southSouth	-0.2059025644 1.485676e-02	-13.859181051	1.119441e-43
agesq	0.0001292290 2.861459e-05	4.516191109	6.296185e-06
foreign_bornAnother country	-0.1217987186 2.493526e-02	-4.884597478	1.036404e-06
relevgProtestant, Evg.	-0.8990971775 2.993072e-02	-30.039280074	3.014013e-198
relevgCatholic, N.E.	-0.0847750884 2.637725e-02	-3.213947322	1.309237e-03

relevgCatholic, Evg.	-0.8136130367 4.619715e-02	-17.611756967	2.001353e-69
relevgMormon	-0.7522145440 6.888285e-02	-10.920200169	9.229218e-28
relevgOthodox	-0.1377021564 8.686844e-02	-1.585180561	1.129253e-01
relevgOth. Christ., N.E.	-0.1974685954 3.158386e-02	-6.252198825	4.047137e-10
relevgOth. Christ., Evg.	-0.8240440503 2.965953e-02	-27.783449380	6.875146e-170
relevaJewish	0.4225478436 4.601750e-02	9.182329245	4.218657e-20
relevgMuslim	-0.1523543686 6.672309e-02	-2.283382978	2.240782e-02
relevgBuddhist	0.2255965415 7.655076e-02	2.947018875	3.208536e-03
relevaHindu	-0.5685844449 1.038062e-01	-5.477365335	4.317053e-08
relevaAtheist	1.1837314320 4.480577e-02	26.419175903	8.251273e-154
relevgAgnostic	0.9777771022 4.057203e-02	24.099780351	2.512999e-128
relevaNothing	0.3440623393 2.773695e-02	12.404477701	2.471189e-35
relevgOther	-0.0213522309 3.903152e-02	-0.547050907	5.843438e-01
relevgUnknown	-0.1288162156 1.660930e-01	-0.775566903	4.380047e-01
household_income\$15,000 to \$19,999	0.0072267014 4.840047e-02	0.149310565	8.813086e-01
household_income\$20,000 to \$24,999	-0.0476341449 4.155499e-02	-1.146291770	2.516744e-01
household_income\$25,000 to \$29,999	-0.0496006760 4.285193e-02	-1.157489942	2.470722e-01
household_income\$30,000 to \$34,999	0.0318238405 4.366841e-02	0.728761079	4.661478e-01
household_income\$35,000 to \$39,999	0.0083698436 4.055500e-02	0.206382541	8.364921e-01
household_income\$40,000 to \$44,999	0.0485837739 4.404671e-02	1.103005687	2.700247e-01
household_income\$45,000 to \$49,999	0.0062389855 4.350321e-02	0.143414380	8.859629e-01
household_income\$50,000 to \$54,999	0.0069642801 4.008470e-02	0.173739132	8.620705e-01
household_income\$55,000 to \$59,999	-0.1116454935 4.590969e-02	-2.431850173	1.502192e-02
household_income\$60,000 to \$64,999	-0.0431042465 4.738513e-02	-0.909657726	3.630030e-01
household_income\$65,000 to \$69,999	-0.0596144618 4.724666e-02	-1.261770961	2.070312e-01
household_income\$70,000 to \$74,999	-0.1191421831 4.574918e-02	-2.604247386	9.207627e-03
household_income\$75,000 to \$79,999	-0.1023381968 4.467948e-02	-2.290496507	2.199255e-02
household_income\$80,000 to \$84,999	-0.0095814071 4.911833e-02	-0.195067861	8.453398e-01
household_income\$85,000 to \$89,999	-0.0208994477 5.254197e-02	-0.397766700	6.908022e-01
household_income\$90,000 to \$94,999	-0.1000482483 5.617262e-02	-1.781085572	7.489847e-02
household_income\$95,000 to \$99,999	-0.1576781885 4.602321e-02	-3.426057980	6.124096e-04
household_income\$100,000 to \$124,999	-0.1251336465 3.545523e-02	-3.529342267	4.165940e-04
household_income\$125,000 to \$149,999	-0.1269608439 3.795346e-02	-3.345171845	8.223160e-04
household_income\$150,000 to \$174,999	-0.1508798748 4.496963e-02	-3.355150593	7.932179e-04
household_income\$175,000 to \$199,999	-0.2353793405 5.213808e-02	-4.514538076	6.345492e-06
household_income\$200,000 to \$249,999	-0.3185158252 4.895156e-02	-6.506755036	7.679148e-11
household_income\$250,000 and above	-0.4425729279 4.679252e-02	-9.458197844	3.132961e-21
household_incomeUnknown	-0.0129087346 4.092892e-02	-0.315393996	7.524625e-01
employmentHomemaker	-0.1845898001 2.8888882e-02	-6.389663180	1.662515e-10

employmentRetired	0.0861760374 2.619423e-02	3.289886542	1.002278e-03
employmentUnemployed or temporarily on layoff	0.1173352894 2.944484e-02	3.984918116	6.750340e-05
employmentPart-time employed	0.0337235953 2.639454e-02	1.277673060	2.013647e-01
employmentPermanently disabled	0.2350849215 3.709185e-02	6.337913585	2.328974e-10
employmentStudent	0.3704641502 3.977079e-02	9.314980761	1.219746e-20
employmentSelf-employed	-0.0245431052 2.948363e-02	-0.832431530	4.051654e-01
employmentOther:	0.0840611088 7.000437e-02	1.200797991	2.298296e-01
employmentUnknown	0.7186953798 3.117251e-01	2.305542544	2.113621e-02
orientation_groupGay man	1.1524599011 5.859573e-02	19.667983188	4.055949e-86
orientation_groupLesbian / gay woman	1.0023256678 7.494676e-02	13.373836348	8.598888e-41
orientation_groupBisexual	0.4678057580 3.685541e-02	12.693001446	6.465951e-37
orientation_groupPrefer not to say	-0.1030108694 5.587950e-02	-1.843446428	6.526386e-02
orientation_groupOther	0.2028410654 6.808080e-02	2.979416729	2.887977e-03
in_unionI formerly was a member of a labor union	0.2587095691 3.048112e-02	8.487534426	2.110672e-17
in_unionNo, I have never been a member of a labor union	0.2074925463 2.550340e-02	8.135876899	4.089672e-16
in_unionUnknown	0.2346763610 1.134718e-01	2.068146272	3.862627e-02
household_gun_ownerGun Household	0.4619211446 2.321986e-02	19.893366766	4.644941e-88
household_gun_ownerNo Gun	0.9042175727 1.731092e-02	52.233932164	0.000000e+00
household_gun_ownerUnknown	0.1354937362 3.658166e-02	3.703870395	2.123348e-04
attr(,"class")			
[1] "coeftest"			
attr(,"method")			
<pre>[1] "z test of coefficients"</pre>			
attr(,"df")			
[1] Inf			
attr(,"nobs")			
[1] 304635			
attr(,"logLik")			
'log Lik.' -163765.2 (df=143)			

Positive values indicate a greater probability of intending to vote for Joe Biden rather than for Donald Trump, while negative values indicate

the opposite.

• Model 1

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	0.22908889	0.04921738	4.6546336	3.245574e-06
metro1	0.43672044	0.01281902	34.0681695	2.184774e-254
wave2	-0.03926616	0.06908737	-0.5683551	5.697939e-01
wave3	-0.07161285	0.06726665	-1.0646114	2.870518e-01
wave4	-0.01765432	0.06792072	-0.2599254	7.949213e-01
wave5	-0.12564533	0.06855100	-1.8328737	6.682136e-02
wave6	-0.06828237	0.06761170	-1.0099194	3.125339e-01
wave7	-0.12070416	0.06780439	-1.7801822	7.504615e-02
wave8	-0.10777351	0.06743194	-1.5982561	1.099860e-01
wave9	-0.07125828	0.06961540	-1.0235993	3.060246e-01
wave10	-0.07727838	0.06942525	-1.1131164	2.656584e-01
wave11	-0.08078702	0.06851845	-1.1790551	2.383762e-01
wave12	-0.09481192	0.06967881	-1.3606995	1.736087e-01
wave13	-0.07841821	0.06769829	-1.1583484	2.467219e-01
wave14	-0.04942501	0.06869963	-0.7194364	4.718721e-01
wave15	-0.10622195	0.07024593	-1.5121439	1.304973e-01
wave16	-0.10816214	0.06801908	-1.5901735	1.117957e-01
wave17	-0.14426400	0.06616412	-2.1803964	2.922809e-02

wave18	-0.17940234	0.06652536	-2.6967511	7.001959e-03
wave19	-0.21204418	0.06892052	-3.0766479	2.093424e-03
wave20	-0.12539353	0.06752101	-1.8571039	6.329637e-02
wave21	-0.15421141	0.06723609	-2.2935809	2.181458e-02
wave22	-0.13734663	0.06840743	-2.0077736	4.466736e-02
wave23	-0.13089490	0.06527617	-2.0052479	4.493655e-02
wave24	-0.15714110	0.06116436	-2.5691614	1.019450e-02
wave25	-0.20033697	0.06563693	-3.0521988	2.271716e-03
wave26	-0.11654752	0.06613652	-1.7622264	7.803106e-02
wave27	-0.13507335	0.06658620	-2.0285486	4.250429e-02
wave28	-0.17531898	0.06499730	-2.6973269	6.989862e-03
wave29	-0.19371783	0.06706508	-2.8885054	3.870774e-03
wave30	-0.29058045	0.06749337	-4.3053185	1.667456e-05
wave31	-0.24887550	0.06583027	-3.7805632	1.564740e-04
wave32	-0.22409854	0.06497836	-3.4488180	5.630461e-04
wave33	-0.21100511	0.06663046	-3.1667968	1.541280e-03
wave34	-0.20883677	0.06755439	-3.0913869	1.992239e-03
wave35	-0.21787753	0.06725852	-3.2394040	1.197798e-03
wave36	-0.24763068	0.06514599	-3.8011654	1.440171e-04
wave37	-0.25941506	0.06402077	-4.0520455	5.077180e-05
wave38	-0.29243922	0.06420247	-4.5549531	5.239726e-06
wave39	-0.34320164	0.06479761	-5.2965167	1.180326e-07
wave40	-0.23467954	0.06490372	-3.6158100	2.994099e-04
wave41	-0.22069722	0.06358293	-3.4710138	5.184973e-04
wave42	-0.22918063	0.06435315	-3.5612964	3.690282e-04
wave43	-0.25687291	0.06919618	-3.7122413	2.054320e-04
wave44	-0.25792121	0.06401327	-4.0291837	5.597086e-05
wave45	-0.21073414	0.06384603	-3.3006615	9.645717e-04
wave46	-0.20486443	0.06406144	-3.1979367	1.384146e-03
wave47	-0.15837824	0.06350205	-2.4940652	1.262893e-02
wave48	-0.15511309	0.06292844	-2.4649124	1.370468e-02
wave49	-0.19103774	0.06355983	-3.0056365	2.650256e-03
wave50	-0.22499355	0.06392939	-3.5194073	4.325121e-04
attr(,"class	s")			
[1] "coeftes	st"			
attr(,"metho	od")			
[1] "z test	of coefficie	ents"		
<pre>attr(,"df")</pre>				
[1] Inf				

attr(,"nobs") [1] 277079 attr(,"logLik") 'log Lik.' -172697.3 (df=51)

• Model 2

(Intercept) metro1 wave2 wave3 wave4 wave5 wave6 wave7 wave8 wave9 wave10 wave11 wave12 wave13 wave14 wave15 wave16 wave17 wave18 wave19 wave20 wave21 wave22 wave23 wave24 wave25 wave26

Estimate	Std. Error	z value	Pr(> z)
0.412044924	0.11137615	3.69957950	2.159570e-04
0.289650883	0.01387170	20.88070266	8.020373e-97
-0.028303057	0.07300526	-0.38768520	6.982490e-01
-0.064603258	0.07039455	-0.91773090	3.587598e-01
-0.005844652	0.07062621	-0.08275471	9.340466e-01
-0.120917464	0.07178668	-1.68439972	9.210444e-02
-0.053125368	0.07071980	-0.75120920	4.525268e-01
-0.115196186	0.07079006	-1.62729327	1.036748e-01
-0.104573872	0.07015102	-1.49069648	1.360412e-01
-0.058817011	0.07228304	-0.81370411	4.158145e-01
-0.072192031	0.07276777	-0.99208794	3.211546e-01
-0.074529870	0.07170515	-1.03939351	2.986218e-01
-0.077701255	0.07345397	-1.05782236	2.901364e-01
-0.062879238	0.07069926	-0.88939032	3.737933e-01
-0.043422028	0.07191505	-0.60379616	5.459792e-01
-0.090359957	0.07354026	-1.22871418	2.191790e-01
-0.101262580	0.07076391	-1.43099177	1.524326e-01
-0.157341772	0.06947041	-2.26487461	2.352038e-02
-0.169405322	0.06960505	-2.43380775	1.494093e-02
-0.236593819	0.07214892	-3.27924289	1.040860e-03
-0.129145447	0.07066183	-1.82765510	6.760133e-02
-0.156619231	0.07019377	-2.23124107	2.566516e-02
-0.138524400	0.07131977	-1.94230012	5.210078e-02
-0.129205508	0.06882091	-1.87741652	6.046103e-02
-0.144885039	0.06384250	-2.26941345	2.324319e-02
-0.204098607	0.06871019	-2.97042689	2.973862e-03
-0.109135426	0.06944714	-1.57148909	1.160691e-01

wave27	-0.135087269 0.06973887 -1.93704414 5.273995e-02
wave28	-0.174751213 0.06849045 -2.55146831 1.072701e-02
wave29	-0.197039285 0.07036451 -2.80026529 5.106062e-03
wave30	-0.311002904 0.07123669 -4.36576858 1.266765e-05
wave31	-0.265080611 0.06894045 -3.84506653 1.205197e-04
wave32	-0.220639953 0.06812512 -3.23874589 1.200565e-03
wave33	-0.218266799 0.06926540 -3.15116635 1.626198e-03
wave34	-0.220415920 0.07122957 -3.09444412 1.971821e-03
wave35	-0.222781472 0.07101064 -3.13729722 1.705132e-03
wave36	-0.257248509 0.06866665 -3.74633830 1.794346e-04
wave37	-0.270033568 0.06733433 -4.01034001 6.063137e-05
wave38	-0.311341342 0.06711127 -4.63918104 3.497925e-06
wave39	-0.362361355 0.06829176 -5.30607714 1.120096e-07
wave40	-0.242246761 0.06795014 -3.56506618 3.637644e-04
wave41	-0.225134985 0.06718078 -3.35118136 8.046758e-04
wave42	-0.247703130 0.06797073 -3.64426163 2.681605e-04
wave43	-0.252154313 0.07275590 -3.46575754 5.287399e-04
wave44	-0.264343252 0.06817926 -3.87717968 1.056743e-04
wave45	-0.197474216 0.06727362 -2.93538862 3.331302e-03
wave46	-0.204601056 0.06741970 -3.03473698 2.407455e-03
wave47	-0.138581170 0.06625564 -2.09161317 3.647313e-02
wave48	-0.152150214 0.06600891 -2.30499509 2.116685e-02
wave49	-0.199494125 0.06644898 -3.00221479 2.680230e-03
wave50	-0.230265251 0.06714331 -3.42945912 6.047855e-04
age	-0.006967677 0.00040800 -17.07763866 2.177547e-65
genderMale	-0.466383591 0.01350752 -34.52768956 3.082207e-261
racehispNon-H. Black	2.240999327 0.03144041 71.27766671 0.000000e+00
racehispNon-H. Indian	0.834440492 0.06756686 12.34984934 4.880274e-35
racehispNon-H. Chinese	0.859069066 0.06740090 12.74566087 3.295859e-37
racehispNon-H. O. Asian	0.682733659 0.04873635 14.00871546 1.378762e-44
racehispNon-H. AIAN	0.168132926 0.06946261 2.42048089 1.549999e-02
racehispNon-H. NHPI	0.634570437 0.14151667
racehispNon-H. Other	0.782211810 0.05359320 14.59535584 3.006399e-48
racehispMexican White	0.869658841 0.03485315 24.95208741 2.026836e-137
racehispCuban White	0.087853756 0.09213923 0.95348918 3.403423e-01
racehispOth. H. White	0.708311248 0.04471071 15.84209385 1.594227e-56
racehispMexican Black	0.935335114 0.14996479 6.23703135 4.459527e-10
racehispOth. H. Black	1.789774003 0.15025950 11.91122047 1.034518e-32
racehispHisp. Asian	0.632290715 0.17714941 3.56925109 3.580032e-04

racehispHisp. AIAN	1.210582954 0.18521499	6.53609584	6.314546e-11
racehispHisp. NHPI	1.012340901 0.23764912	4.25981335	2.045977e-05
racehispMexican Other	1.427863399 0.05871615	24.31806909	1.262539e-130
racehispOth. H. Other	1.256407907 0.07068127	17.77568377	1.090599e-70
educationMiddle School - Grades 4 - 8	0.037885466 0.14214249	0.26653160	7.898298e-01
educationCompleted some high school	-0.084005531 0.10174334	-0.82566120	4.089963e-01
educationHigh school graduate	-0.099605941 0.09999160	-0.99614312	3.191806e-01
educationOther post high school vocational training	-0.166491091 0.10231042	-1.62731310	1.036706e-01
educationCompleted some college, but no degree	0.022166377 0.09981109	0.22208331	8.242490e-01
educationAssociate Degree	0.064295871 0.10137537	0.63423564	5.259271e-01
educationCollege Degree (such as B.A., B.S.)	0.245449630 0.10001730	2.45407179	1.412488e-02
educationCompleted some graduate, but no degree	0.372278137 0.10570429	3.52188286	4.284934e-04
educationMasters degree	0.323742715 0.10113846	3.20098509	1.369586e-03
educationDoctorate degree	0.467806071 0.10868777	4.30412794	1.676448e-05
attr(,"class")			
[1] "coeftest"			

• Model 3

attr(,"df") [1] Inf

attr(,"nobs")

attr(,"method")
[1] "z test of coefficients"

[1] 277079 attr(,"logLik") 'log Lik.' -157804.2 (df=80)

-0.1382855634	7.559685e-02	-1.82925035	6.736211e-02
-0.1114065800	7.467826e-02	-1.49182072	1.357461e-01
-0.0640107548	7.756445e-02	-0.82525896	4.092246e-01
-0.0655717761	7.737881e-02	-0.84741251	3.967652e-01
-0.0744615251	7.666185e-02	-0.97129834	3.313997e-01
-0.0976918483	7.873350e-02	-1.24079138	2.146828e-01
-0.0708778561	7.490750e-02	-0.94620502	3.440440e-01
-0.0689152931	7.723592e-02	-0.89226996	3.722483e-01
-0.0996787293	7.841404e-02	-1.27118472	2.036629e-01
-0.0975582688	7.569214e-02	-1.28888248	1.974389e-01
-0.1585217742	7.396419e-02	-2.14322325	3.209518e-02
-0.1873209971	7.529088e-02	-2.48796395	1.284768e-02
-0.2281811873	7.771297e-02	-2.93620476	3.322549e-03
-0.1331105287	7.586007e-02	-1.75468501	7.931320e-02
-0.1770944615	7.444141e-02	-2.37897789	1.736072e-02
-0.1760508945	7.603132e-02	-2.31550477	2.058532e-02
-0.1610792401	7.349959e-02	-2.19156639	2.841083e-02
-0.1431352159	6.809656e-02	-2.10194483	3.555811e-02
-0.2339254067	7.376811e-02	-3.17109123	1.518674e-03
-0.1435115228	7.411219e-02	-1.93640925	5.281760e-02
-0.1538411504	7.466662e-02	-2.06037388	3.936281e-02
-0.1992241059	7.281925e-02	-2.73587162	6.221529e-03
-0.1995085335	7.592718e-02	-2.62762999	8.598198e-03
-0.3358582352	7.675355e-02	-4.37580050	1.209876e-05
-0.2679995733	7.390846e-02	-3.62610151	2.877323e-04
-0.2361278170	7.267821e-02	-3.24894915	1.158322e-03
-0.2011776111	7.277397e-02	-2.76441725	5.702457e-03
-0.2488815305	7.589334e-02	-3.27935927	1.040431e-03
-0.2909333557	7.536024e-02	-3.86056825	1.131236e-04
-0.2767570118	7.381223e-02	-3.74947361	1.772061e-04
-0.2767006576	7.200669e-02	-3.84270741	1.216845e-04
-0.3046971472	7.233795e-02	-4.21213386	2.529696e-05
-0.3810744633	7.314396e-02	-5.20992379	1.889182e-07
-0.2479795088	7.322542e-02	-3.38652219	7.078455e-04
-0.2383865680	7.168546e-02	-3.32545230	8.827520e-04
-0.2600786545	7.190311e-02	-3.61707107	2.979555e-04
-0.2569997617	7.758165e-02	-3.31263613	9.242114e-04
-0.2829388923	7.291295e-02	-3.88050270	1.042408e-04
-0.2010218333	7.159134e-02	-2.80790719	4.986459e-03

wave7 wave8 wave9 wave10 wave11 wave12 wave13 wave14 wave15 wave16 wave17 wave18 wave19 wave20 wave21 wave22 wave23 wave24 wave25 wave26 wave27 wave28 wave29 wave30 wave31 wave32 wave33 wave34 wave35 wave36 wave37 wave38 wave39 wave40 wave41 wave42 wave43 wave44

wave45

wave46	-0.2260947253 7.208114e-02	-3.13666975	1.708785e-03
wave47	-0.1404963127 7.083900e-02	-1.98331866	4.733185e-02
wave48	-0.1770703999 7.013331e-02	-2.52476903	1.157744e-02
wave49	-0.2055124580 7.082688e-02	-2.90161653	3.712427e-03
wave50	-0.2500238800 7.171057e-02	-3.48656953	4.892582e-04
age	-0.0175819411 2.941600e-03	-5.97699890	2.272857e-09
genderMale	-0.5287948987 1.569209e-02	-33.69818077	6.146486e-249
racehispNon-H. Black	2.5893668475 3.552474e-02	72.88911043	0.000000e+00
racehispNon-H. Indian	0.8568076534 8.458563e-02	10.12947115	4.088547e-24
racehispNon-H. Chinese	0.6312270531 7.205967e-02	8.75978225	1.956279e-18
racehispNon-H. O. Asian	0.6236512121 5.419202e-02	11.50817340	1.199930e-30
racehispNon-H. AIAN	0.2552626314 7.308089e-02	3.49287778	4.778452e-04
racehispNon-H. NHPI	0.7445387341 1.507563e-01	4.93869036	7.864898e-07
racehispNon-H. Other	0.7150258419 5.906462e-02	12.10582379	9.837675e-34
racehispMexican White	0.9918276692 3.779041e-02	26.24548463	8.048379e-152
racehispCuban White	0.1992751213 9.932766e-02	2.00623988	4.483066e-02
racehispOth. H. White	0.7936952356 4.868814e-02	16.30161309	9.612142e-60
racehispMexican Black	1.2825178129 1.838886e-01	6.97442898	3.071156e-12
racehispOth. H. Black	2.0141741675 1.710881e-01	11.77273199	5.394862e-32
racehispHisp. Asian	0.6691958137 2.014225e-01	3.32234841	8.926316e-04
racehispHisp. AIAN	1.2979883527 1.863058e-01	6.96697916	3.238186e-12
racehispHisp. NHPI	1.1345780111 2.588232e-01	4.38360183	1.167330e-05
racehispMexican Other	1.5083590086 6.178415e-02	24.41336606	1.233472e-131
racehispOth. H. Other	1.3223710455 7.551208e-02	17.51204575	1.159511e-68
educationMiddle School - Grades 4 - 8	-0.0021255735 1.564575e-01	-0.01358563	9.891606e-01
educationCompleted some high school	-0.1160392306 1.118151e-01	-1.03777772	2.993736e-01
educationHigh school graduate	-0.0578775982 1.098086e-01	-0.52707696	5.981401e-01
educationOther post high school vocational training	-0.0361160147 1.123182e-01	-0.32155088	7.477930e-01
educationCompleted some college, but no degree	0.0894779247 1.096334e-01	0.81615551	4.144112e-01
educationAssociate Degree	0.1944226753 1.114123e-01	1.74507401	8.097199e-02
educationCollege Degree (such as B.A., B.S.)	0.3706273371 1.102491e-01	3.36172625	7.745687e-04
educationCompleted some graduate, but no degree	0.5085404316 1.159901e-01	4.38434242	1.163367e-05
educationMasters degree	0.4959567761 1.117658e-01	4.43746518	9.102444e-06
educationDoctorate degree	0.5988377405 1.198332e-01	4.99725893	5.815097e-07
southSouth	-0.2261601194 1.581968e-02	-14.29612359	2.313416e-46
agesq	0.0001219226 3.066087e-05	3.97649002	6.993993e-05
foreign_bornAnother country	-0.0949060335 2.700612e-02	-3.51424209	4.410107e-04
relevgProtestant, Evg.	-0.8927393516 3.151671e-02	-28.32590671	1.658097e-176
relevgCatholic, N.E.	-0.0382736029 2.746062e-02	-1.39376310	1.633892e-01

relevgCatholic, Evg.	-0.4406245173 4.7805	39e-02 -9	9.21704750	3.053933e-20
relevgMormon	-0.8644459214 7.8161	85e-02 -1	1.05969116	1.967739e-28
relevgOthodox	-0.2539424504 9.3878	326e-02 -2	2.70501859	6.830057e-03
relevgOth. Christ., N.E.	-0.2293184318 3.3508	868e-02 -0	6.84355314	7.725265e-12
relevgOth. Christ., Evg.	-0.8233541204 3.1235	70e-02 -20	5.35939104	4.005712e-153
relevgJewish	0.4791649408 4.8009	03e-02	9.98072490	1.851094e-23
relevgMuslim	0.2702193969 7.1662	257e-02	3.77071870	1.627781e-04
relevgBuddhist	0.1584113451 8.2469	20e-02	1.92085453	5.475005e-02
relevgHindu	-0.3342641228 1.1244	37e-01 -2	2.97272449	2.951693e-03
relevgAtheist	1.1060833929 4.6025	88e-02 24	4.03177022	1.294889e-127
relevgAgnostic	0.8636140312 4.2044	34e-02 20	0.54055399	9.349014e-94
relevgNothing	0.3401747786 2.9104	12e-02 1	1.68820008	1.464576e-31
relevgOther	-0.0957029791 4.2230)25e-02 -2	2.26621880	2.343799e-02
relevgUnknown	-0.3911487678 1.8850)80e-01 -2	2.07497130	3.798919e-02
household_income\$15,000 to \$19,999	-0.0451202494 5.2321	.34e-02 -0	0.86236808	3.884850e-01
household_income\$20,000 to \$24,999	-0.0561983762 4.5191	.65e-02 -1	1.24355676	2.136627e-01
household_income\$25,000 to \$29,999	-0.0882713469 4.6754	21e-02 -1	1.88798709	5.902768e-02
household_income\$30,000 to \$34,999	-0.0184963340 4.7260)47e-02 -0	0.39137011	6.955237e-01
household_income\$35,000 to \$39,999	-0.1028321123 4.3969)82e-02 -2	2.33869753	1.935109e-02
household_income\$40,000 to \$44,999	-0.0909057283 4.7768	804e-02 -1	1.90306577	5.703196e-02
household_income\$45,000 to \$49,999	-0.1305651274 4.7430)81e-02 -2	2.75274908	5.909717e-03
household_income\$50,000 to \$54,999	-0.0886027308 4.3318	805e-02 -2	2.04539962	4.081548e-02
household_income\$55,000 to \$59,999	-0.2071150239 4.9509	97e-02 -4	4.18329948	2.873085e-05
household_income\$60,000 to \$64,999	-0.1118975652 5.0198	37e-02 -2	2.22910755	2.580675e-02
household_income\$65,000 to \$69,999	-0.1619652592 5.0604	05e-02 -3	3.20063817	1.371236e-03
household_income\$70,000 to \$74,999	-0.2361272172 4.8852	275e-02 -4	4.83344818	1.341882e-06
household_income\$75,000 to \$79,999	-0.1957625108 4.8007	'64e-02 -4	4.07773675	4.547621e-05
household_income\$80,000 to \$84,999	-0.2039813978 5.2123	872e-02 -3	3.91340813	9.100253e-05
household_income\$85,000 to \$89,999	-0.1741280187 5.5190)78e-02 -3	3.15502001	1.604871e-03
household_income\$90,000 to \$94,999	-0.1638448606 6.0324	36e-02 -2	2.71606458	6.606303e-03
household_income\$95,000 to \$99,999	-0.2456212965 4.9545	515e-02 -4	4.95752417	7.139716e-07
household_income\$100,000 to \$124,999	-0.2409930879 3.8395	32e-02 -0	6.27662695	3.459969e-10
household_income\$125,000 to \$149,999	-0.2507213884 4.1022	29e-02 -0	5.11183287	9.849330e-10
household_income\$150,000 to \$174,999	-0.2709788666 4.7868	36e-02 -	5.66091843	1.505650e-08
household_income\$175,000 to \$199,999	-0.3407096134 5.5350)10e-02 -0	6.15553756	7.482326e-10
household_income\$200,000 to \$249,999	-0.3558089873 5.2003	30e-02 -0	5.84204672	7.806961e-12
household_income\$250,000 and above	-0.3008060317 5.0474	58e-02 -	5.95955537	2.529252e-09
household_incomeUnknown	-0.1278877361 4.4531	_57e-02 -2	2.87184406	4.080843e-03
employmentHomemaker	-0.2414028949 3.0696	516e-02 -2	7.86427081	3.712536e-15

0.0044001157	2.756506e-02	3.06431810	2.181668e-03
-0.0316338270	3.199863e-02	-0.98859932	3.228592e-01
-0.0107518330	2.835233e-02	-0.37922226	7.045228e-01
0.2013908913	3.981938e-02	5.05760932	4.245451e-07
0.2845912011	4.290864e-02	6.63249162	3.300671e-11
-0.0839186316	3.152060e-02	-2.66234244	7.759889e-03
0.0998402848	7.979752e-02	1.25117024	2.108724e-01
0.4060799575	3.687314e-01	1.10128941	2.707707e-01
1.2638030259	6.420608e-02	19.68354249	2.983976e-86
1.1289856425	9.187018e-02	12.28892395	1.038796e-34
0.4920349231	3.938061e-02	12.49434398	8.015474e-36
0.0796226188	6.531916e-02	1.21897803	2.228525e-01
0.3336763201	7.500558e-02	4.44868685	8.639687e-06
-0.0653494019	3.243498e-02	-2.01478167	4.392753e-02
n -0.2011458380	2.752815e-02	-7.30691483	2.733457e-13
0.0202887107	1.206629e-01	0.16814368	8.664702e-01
0.3726624784	2.470181e-02	15.08644294	1.988787e-51
0.8938790707	1.818352e-02	49.15875107	0.000000e+00
-0.0307202078	4.023319e-02	-0.76355393	4.451331e-01
	-0.0316338270 -0.0107518330 0.2013908913 0.2845912011 -0.0839186316 0.0998402848 0.4060799575 1.2638030259 1.1289856425 0.4920349231 0.0796226188 0.3336763201 -0.0653494019 1.0.0653494019 1.0.0202887107 0.3726624784 0.8938790707 -0.0307202078	-0.0316338270 3.199863e-02 -0.0107518330 2.835233e-02 0.2013908913 3.981938e-02 0.2845912011 4.290864e-02 -0.0839186316 3.152060e-02 0.0998402848 7.979752e-02 0.4060799575 3.687314e-01 1.2638030259 6.420608e-02 1.1289856425 9.187018e-02 0.4920349231 3.938061e-02 0.0796226188 6.531916e-02 0.3336763201 7.500558e-02 -0.0653494019 3.243498e-02 -0.2011458380 2.752815e-02 0.0202887107 1.206629e-01 0.3726624784 2.470181e-02 0.8938790707 1.818352e-02 -0.0307202078 4.023319e-02	-0.0316338270 3.199863e-02 -0.98859932 -0.0107518330 2.835233e-02 -0.37922226 0.2013908913 3.981938e-02 5.05760932 0.2845912011 4.290864e-02 6.63249162 -0.0839186316 3.152060e-02 -2.66234244 0.0998402848 7.979752e-02 1.25117024 0.4060799575 3.687314e-01 1.10128941 1.2638030259 6.420608e-02 19.68354249 1.1289856425 9.187018e-02 12.28892395 0.4920349231 3.938061e-02 12.49434398 0.0796226188 6.531916e-02 1.21897803 0.3336763201 7.500558e-02 4.44868685 -0.0653494019 3.243498e-02 -2.01478167 -0.2011458380 2.752815e-02 -7.30691483 0.0202887107 1.206629e-01 0.16814368 0.3726624784 2.470181e-02 15.08644294 0.8938790707 1.818352e-02 49.15875107 -0.0307202078 4.023319e-02 -0.76355393

[1] Inf attr(,"nobs") [1] 277079 attr(,"logLik") 'log Lik.' -143613.3 (df=143) Positive values indicate a greater probability of intending to vote for a Democratic House candidate rather than for a Republican one, while

negative values indicate the opposite.

• Model 1

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	0.045325889	0.05309622	0.8536556	3.932958e-01
metro1	0.454533482	0.01370470	33.1662385	3.303853e-241
wave2	-0.024587424	0.07485631	-0.3284616	7.425627e-01
wave3	-0.075278286	0.07251510	-1.0381050	2.992212e-01
wave4	-0.040317392	0.07372247	-0.5468807	5.844607e-01
wave5	-0.058811934	0.07415284	-0.7931178	4.277092e-01
wave6	-0.043751293	0.07305961	-0.5988438	5.492771e-01
wave7	-0.126048912	0.07349473	-1.7150741	8.633164e-02
wave8	-0.080115857	0.07253092	-1.1045752	2.693437e-01
wave9	-0.037339068	0.07520156	-0.4965199	6.195277e-01
wave10	-0.070222906	0.07489189	-0.9376570	3.484207e-01
wave11	-0.086132923	0.07399143	-1.1640932	2.443862e-01
wave12	-0.052807664	0.07505359	-0.7035995	4.816822e-01
wave13	-0.050684885	0.07315386	-0.6928532	4.884017e-01
wave14	-0.016825484	0.07439640	-0.2261599	8.210770e-01
wave15	-0.081340367	0.07596421	-1.0707722	2.842719e-01
wave16	-0.098858926	0.07386030	-1.3384581	1.807471e-01
wave17	-0.082762323	0.07168083	-1.1545950	2.482563e-01

wave18	-0.111451798	0.07187919	-1.5505432	1.210112e-01
wave19	-0.125107703	0.07428323	-1.6841985	9.214331e-02
wave20	-0.041802838	0.07320818	-0.5710133	5.679907e-01
wave21	-0.045476483	0.07279347	-0.6247330	5.321463e-01
wave22	-0.096838527	0.07442669	-1.3011264	1.932152e-01
wave23	-0.074544096	0.07041140	-1.0586935	2.897394e-01
wave24	-0.119406156	0.06603137	-1.8083247	7.055599e-02
wave25	-0.116671485	0.07035339	-1.6583634	9.724414e-02
wave26	0.014212752	0.07129527	0.1993506	8.419885e-01
wave27	-0.083567281	0.07172053	-1.1651793	2.439464e-01
wave28	-0.038607969	0.07015311	-0.5503387	5.820871e-01
wave29	-0.070007362	0.07206492	-0.9714485	3.313250e-01
wave30	-0.064892910	0.07242483	-0.8960036	3.702509e-01
wave31	-0.086221600	0.07064292	-1.2205272	2.222651e-01
wave32	-0.079469295	0.06942904	-1.1446117	2.523700e-01
wave33	-0.102087493	0.07190974	-1.4196616	1.557062e-01
wave34	-0.056672648	0.07267248	-0.7798365	4.354871e-01
wave35	-0.040215999	0.07224078	-0.5566939	5.777366e-01
wave36	-0.089018542	0.06974504	-1.2763422	2.018346e-01
wave37	-0.132073132	0.06845784	-1.9292623	5.369830e-02
wave38	-0.103139132	0.06860400	-1.5033982	1.327364e-01
wave39	-0.113848042	0.06963081	-1.6350240	1.020440e-01
wave40	-0.058415449	0.06948684	-0.8406693	4.005332e-01
wave41	-0.080774345	0.06841846	-1.1805929	2.377645e-01
wave42	-0.059355654	0.06860753	-0.8651477	3.869577e-01
wave43	-0.039661639	0.07393636	-0.5364294	5.916618e-01
wave44	-0.045280725	0.06833702	-0.6626090	5.075810e-01
wave45	-0.025520092	0.06770038	-0.3769564	7.062060e-01
wave46	-0.024791378	0.06837219	-0.3625945	7.169078e-01
wave47	0.003156255	0.06793065	0.0464629	9.629413e-01
wave48	-0.056064365	0.06727716	-0.8333344	4.046562e-01
wave49	-0.012693227	0.06800927	-0.1866397	8.519432e-01
wave50	-0.104115434	0.06829557	-1.5244829	1.273881e-01
attr(,"class	s")			
[1] "coeftes	st"			
attr(,"metho	("bc			
[1] "z test	of coefficier	its"		
<pre>attr(,"df")</pre>				
[1] Inf				

attr(,"nobs") [1] 241201 attr(,"logLik") 'log Lik.' -148928.4 (df=51)

• Model 2

Estimate Std. Error	z value	Pr(> z)
0.214783295 0.1284262877	1.67242469	9.444061e-02
0.310344264 0.0148477558	20.90176238	5.160420e-97
-0.010265469 0.0788423545	-0.13020247	8.964062e-01
-0.076118895 0.0762332203	-0.99850032	3.180368e-01
-0.031238158 0.0771790695	-0.40474909	6.856620e-01
-0.061007976 0.0780551962	-0.78160044	4.344494e-01
-0.034430428 0.0767273814	-0.44873718	6.536213e-01
-0.113689561 0.0762149871	-1.49169560	1.357790e-01
-0.080159526 0.0756460619	-1.05966556	2.892968e-01
-0.027258630 0.0779997938	-0.34947054	7.267361e-01
-0.052197637 0.0791322646	-0.65962522	5.094944e-01
-0.088419995 0.0778970020	-1.13508855	2.563382e-01
-0.014904077 0.0792335589	-0.18810308	8.507958e-01
-0.039708460 0.0769144562	-0.51626784	6.056674e-01
-0.014373002 0.0780225245	-0.18421606	8.538440e-01
-0.054566000 0.0796547920	-0.68503098	4.933244e-01
-0.098696199 0.0777172988	-1.26993862	2.041065e-01
-0.095544168 0.0757643817	-1.26106972	2.072837e-01
-0.119298542 0.0758046943	-1.57376193	1.155425e-01
-0.151663384 0.0784274211	-1.93380558	5.313704e-02
-0.050040655 0.0771344657	-0.64874573	5.165027e-01
-0.044460621 0.0764204688	-0.58178943	5.607085e-01
-0.089710754 0.0778018440	-1.15306720	2.488828e-01
-0.076783940 0.0745050865	-1.03058655	3.027347e-01
-0.106188406 0.0691370656	-1.53591138	1.245601e-01
-0.119294641 0.0736186932	-1.62043953	1.051379e-01
0.047377234 0.0751631180	0.63032555	5.284816e-01
	Estimate Std. Error 0.214783295 0.1284262877 0.310344264 0.0148477558 -0.010265469 0.0788423545 -0.076118895 0.0762332203 -0.031238158 0.0771790695 -0.061007976 0.0780551962 -0.034430428 0.0767273814 -0.113689561 0.0762149871 -0.080159526 0.0756460619 -0.027258630 0.0779938 -0.052197637 0.0791322646 -0.088419995 0.0778970020 -0.014904077 0.0792335589 -0.039708460 0.0769144562 -0.039708460 0.0769144562 -0.014373002 0.0780225245 -0.054566000 0.0796547920 -0.098696199 0.0777172988 -0.095544168 0.0757643817 -0.119298542 0.0758046943 -0.151663384 0.0784274211 -0.050040655 0.0771344657 -0.044460621 0.0764204688 -0.089710754 0.0778018440 -0.076783940 0.0745050865 -0.106188406 0.0691370656 -0.119294641 0.0736186932 0.047377234 0.0751631180	EstimateStd. Errorz value0.2147832950.12842628771.672424690.3103442640.014847755820.90176238-0.0102654690.0788423545-0.13020247-0.0761188950.0762332203-0.99850032-0.0312381580.0771790695-0.40474909-0.0610079760.0780551962-0.78160044-0.0344304280.0767273814-0.44873718-0.1136895610.0762149871-1.49169560-0.0801595260.0756460619-1.05966556-0.0272586300.0779997938-0.34947054-0.0521976370.0791322646-0.65962522-0.0884199950.0778970020-1.13508855-0.0149040770.0792335589-0.18810308-0.0397084600.0769144562-0.51626784-0.0545660000.07780225245-0.18421606-0.0545660000.0777172988-1.26993862-0.0986961990.0777172988-1.26993862-0.0955441680.0757643817-1.26106972-0.1192985420.0758046943-1.57376193-0.1516633840.0784274211-1.93380558-0.0500406550.0771344657-0.64874573-0.0444606210.0764204688-0.58178943-0.0897107540.0778018440-1.15306720-0.0767839400.0736186932-1.620439530.0473772340.07516311800.63032555

wave27	-0.077279651 0.0750423331 -1.02981408 3.030973e-01
wave28	-0.021478594 0.0736033971 -0.29181525 7.704279e-01
wave29	-0.066245139 0.0756688777 -0.87546084 3.813232e-01
wave30	-0.063584779 0.0763372209 -0.83294594 4.048752e-01
wave31	-0.094517472 0.0740157092 -1.27699204 2.016051e-01
wave32	-0.055479819 0.0723589378 -0.76673070 4.432416e-01
wave33	-0.103623788 0.0752655019 -1.37677668 1.685813e-01
wave34	-0.044452377 0.0765312370 -0.58083965 5.613485e-01
wave35	-0.032037232 0.0766595925 -0.41791550 6.760089e-01
wave36	-0.088116576 0.0737890943 -1.19416800 2.324123e-01
wave37	-0.136591321 0.0723248131 -1.88858173 5.894790e-02
wave38	-0.110670861 0.0721705574 -1.53346274 1.251619e-01
wave39	-0.110078847 0.0736758621 -1.49409650 1.351504e-01
wave40	-0.052296647 0.0724984692 -0.72134829 4.706953e-01
wave41	-0.065128157 0.0722191733 -0.90181255 3.671565e-01
wave42	-0.060363789 0.0727170897 -0.83011833 4.064719e-01
wave43	-0.035472667 0.0786534060 -0.45099975 6.519897e-01
wave44	-0.035812544 0.0727689766 -0.49214028 6.226202e-01
wave45	-0.005485325 0.0713431329 -0.07688652 9.387138e-01
wave46	-0.019607564 0.0717122356 -0.27342006 7.845303e-01
wave47	0.023103922 0.0712734102 0.32415907 7.458176e-01
wave48	-0.050600896 0.0707581665 -0.71512447 4.745321e-01
wave49	0.001746634 0.0713183336 0.02449067 9.804612e-01
wave50	-0.102798934 0.0714894530 -1.43795944 1.504456e-01
age	-0.007799985 0.0004377454 -17.81854120 5.074258e-71
genderMale	-0.404131669 0.0145336936 -27.80653570 3.616116e-170
racehispNon-H. Black	2.311884972 0.0333110294 69.40298784 0.000000e+00
racehispNon-H. Indian	0.995825532 0.0731483429 13.61378116 3.316323e-42
racehispNon-H. Chinese	0.779252127 0.0698031846 11.16356126 6.147848e-29
racehispNon-H. O. Asian	0.693386056 0.0516133086 13.43424931 3.809114e-41
racehispNon-H. AIAN	0.275184840 0.0780799824 3.52439680 4.244481e-04
racehispNon-H. NHPI	0.658938672 0.1533909526 4.29581185 1.740552e-05
racehispNon-H. Other	0.876954430 0.0582344110 15.05904183 3.011196e-51
racehispMexican White	0.825437312 0.0372370326 22.16710770 7.135037e-109
racehispCuban White	0.005176876 0.0945976427 0.05472521 9.563574e-01
racehispOth. H. White	0.716950106 0.0478680412 14.97763617 1.028091e-50
racehispMexican Black	1.011702682 0.1621838077 6.23800055 4.431991e-10
racehispOth. H. Black	1.486208679 0.1516657472 9.79923751 1.134387e-22
racehispHisp. Asian	0.480437304 0.1879020174 2.55685016 1.056247e-02

racehispHisp. AIAN 1.171557518 0.1997155182 5.86613163 4.460797e-09 racehispHisp. NHPI 0.914420620 0.2584194743 3.53851281 4.023878e-04 racehispMexican Other 1.374077931 0.0631658641 21.75348901 6.402093e-105 racehispOth. H. Other 1.240823725 0.0761721623 16.28972695 1.167493e-59 0.062624349 0.1707554422 educationMiddle School - Grades 4 - 8 0.36674877 7.138064e-01 educationCompleted some high school -0.010749245 0.1194460969 -0.08999244 9.282932e-01 educationHigh school graduate -0.094598122 0.1174023381 -0.80576012 4.203812e-01 educationOther post high school vocational training -0.147188722 0.1197255044 -1.22938486 2.189275e-01 educationCompleted some college, but no degree 0.027174862 0.1171225313 0.23202078 8.165219e-01 educationAssociate Degree 0.100582766 0.1185769484 0.84824890 3.962994e-01 educationCollege Degree (such as B.A., B.S.) 0.210808881 0.1172428915 1.79805256 7.216868e-02 educationCompleted some graduate, but no degree 0.328925251 0.1223960332 2.68738490 7.201392e-03 educationMasters degree 0.322779776 0.1182000012 2.73079334 6.318208e-03 educationDoctorate degree 0.481743645 0.1250699810 3.85179274 1.172562e-04 attr(,"class") [1] "coeftest" attr(,"method")

• Model 3

attr(,"df")
[1] Inf

attr(,"nobs")
[1] 241201
attr(,"logLik")

[1] "z test of coefficients"

'log Lik.' -135594.5 (df=80)

	Estimate Std. Error	z value	Pr(> z)
(Intercept)	5.244776e-02 1.735842e-01	0.302145861	7.625409e-01
metro1	1.045153e-01 1.670328e-02	6.257173849	3.920163e-10
wave2	-7.909472e-02 8.466887e-02	-0.934165280	3.502186e-01
wave3	-1.179215e-01 8.346562e-02	-1.412815326	1.577100e-01
wave4	-3.287039e-03 8.470294e-02	-0.038806667	9.690445e-01
wave5	-5.848859e-02 8.452512e-02	-0.691966944	4.889581e-01
wave6	-8.451255e-02 8.274971e-02	-1.021303241	3.071108e-01

-1.107521e-01	8.307663e-02	-1.333131555	1.824886e-01
-1.043175e-01	8.300238e-02	-1.256801292	2.088256e-01
-3.997038e-02	8.543607e-02	-0.467839636	6.398993e-01
-4.111291e-02	8.557740e-02	-0.480417818	6.309303e-01
-1.078186e-01	8.427381e-02	-1.279384032	2.007619e-01
-4.164986e-02	8.588935e-02	-0.484924587	6.277298e-01
-5.484453e-02	8.421373e-02	-0.651253946	5.148826e-01
-5.314143e-02	8.598065e-02	-0.618062685	5.365340e-01
-5.902868e-02	8.654060e-02	-0.682092395	4.951805e-01
-1.081173e-01	8.523832e-02	-1.268411437	2.046511e-01
-1.069026e-01	8.301046e-02	-1.287820412	1.978085e-01
-1.593464e-01	8.417098e-02	-1.893127004	5.834098e-02
-1.354852e-01	8.633948e-02	-1.569215299	1.165978e-01
-4.322034e-02	8.428706e-02	-0.512775497	6.081084e-01
-7.351261e-02	8.300568e-02	-0.885633413	3.758151e-01
-1.209184e-01	8.452235e-02	-1.430608913	1.525423e-01
-9.989463e-02	8.188655e-02	-1.219914929	2.224971e-01
-9.586834e-02	7.535590e-02	-1.272207481	2.032994e-01
-1.472092e-01	8.100719e-02	-1.817236268	6.918094e-02
2.510910e-02	8.186663e-02	0.306707411	7.590661e-01
-9.787963e-02	8.234786e-02	-1.188611811	2.345925e-01
-4.170580e-02	8.063317e-02	-0.517228875	6.049964e-01
-6.017269e-02	8.378964e-02	-0.718139967	4.726710e-01
-7.277161e-02	8.442784e-02	-0.861938546	3.887213e-01
-9.468985e-02	8.097804e-02	-1.169327480	2.422717e-01
-6.960309e-02	7.881067e-02	-0.883168264	3.771454e-01
-7.265605e-02	8.119760e-02	-0.894805437	3.708911e-01
-7.594723e-02	8.382513e-02	-0.906019787	3.649254e-01
-9.995475e-02	8.321202e-02	-1.201205585	2.296715e-01
-9.537852e-02	8.152868e-02	-1.169876982	2.420505e-01
-1.390515e-01	7.907336e-02	-1.758512796	7.866030e-02
-9.049262e-02	7.930987e-02	-1.141000673	2.538696e-01
-1.040627e-01	8.112703e-02	-1.282712406	1.995929e-01
-3.990258e-02	8.007462e-02	-0.498317487	6.182603e-01
-7.424485e-02	7.914012e-02	-0.938144249	3.481703e-01
-7.310496e-02	7.935074e-02	-0.921289059	3.568995e-01
-4.262952e-02	8.632231e-02	-0.493841249	6.214183e-01
-3.084479e-02	7.991743e-02	-0.385958276	6.995276e-01
-9.846880e-04	7.813610e-02	-0.012602215	9.899452e-01

wave7 wave8 wave9 wave10 wave11 wave12 wave13 wave14 wave15 wave16 wave17 wave18 wave19 wave20 wave21 wave22 wave23 wave24 wave25 wave26 wave27 wave28 wave29 wave30 wave31 wave32 wave33 wave34 wave35 wave36 wave37 wave38 wave39 wave40 wave41 wave42 wave43 wave44

wave45

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2.668297e-02 7.786992e-02 -7.450198e-02 7.690501e-02 -9.067080e-04 7.790137e-02 -1.180724e-01 7.832255e-02 -1.261828e-02 3.246055e-03	0.342660796 -0.968753196 -0.011639179 -1 507515199	7.318537e-01 3.326683e-01 9.907135e-01
-7.450198e-02 7.690501e-02 -9.067080e-04 7.790137e-02 -1.180724e-01 7.832255e-02 -1.261828e-02 3.246055e-03	-0.968753196 -0.011639179 -1 507515199	3.326683e-01 9.907135e-01
-9.067080e-04 7.790137e-02 -1.180724e-01 7.832255e-02 -1.261828e-02 3.246055e-03	-0.011639179	9.907135e-01
-1.180724e-01 7.832255e-02 -1.261828e-02 3.246055e-03	-1 507515199	
-1.261828e-02 3.246055e-03	T. JOI JTJTJJ	1.316787e-01
	-3.887266792	1.013793e-04
-4.653209e-01 1.708184e-02	-27.240683321	2.142793e-163
2.718150e+00 3.827388e-02	71.018415394	0.000000e+00
8.555001e-01 9.194224e-02	9.304755873	1.343005e-20
4.680380e-01 7.637136e-02	6.128448233	8.874029e-10
5.785887e-01 5.833364e-02	9.918612256	3.455267e-23
3.553557e-01 8.167675e-02	4.350757286	1.356682e-05
7.507830e-01 1.692607e-01	4.435660144	9.179056e-06
7.673648e-01 6.481259e-02	11.839748189	2.431820e-32
9.688841e-01 4.085208e-02	23.716881543	2.414683e-124
7.973526e-02 1.033779e-01	0.771298695	4.405299e-01
7.869644e-01 5.272923e-02	14.924631934	2.278896e-50
1.474921e+00 2.005568e-01	7.354129972	1.921747e-13
1.780722e+00 1.799206e-01	9.897264026	4.278188e-23
4.919335e-01 2.108620e-01	2.332964013	1.965003e-02
1.235626e+00 2.077614e-01	5.947332673	2.725471e-09
9.081829e-01 2.867224e-01	3.167463905	1.537748e-03
1.433089e+00 6.757172e-02	21.208413014	7.986221e-100
1.307498e+00 8.134272e-02	16.073937865	3.885967e-58
2.645806e-02 1.931781e-01	0.136962033	8.910608e-01
-4.371626e-02 1.382980e-01	-0.316101908	7.519252e-01
-5.040993e-02 1.360863e-01	-0.370426295	7.110649e-01
-2.940801e-02 1.385513e-01	-0.212253587	8.319092e-01
8.438813e-02 1.357552e-01	0.621619679	5.341920e-01
2.316744e-01 1.373796e-01	1.686381895	9.172227e-02
3.460038e-01 1.363563e-01	2.537498019	1.116480e-02
4.752606e-01 1.414568e-01	3.359758617	7.801060e-04
5.115668e-01 1.376778e-01	3.715682530	2.026559e-04
6.309918e-01 1.447731e-01	4.358487998	1.309641e-05
-2.470783e-01 1.737485e-02	-14.220453960	6.840773e-46
6.572466e-05 3.353871e-05	1.959665848	5.003486e-02
-3.925715e-02 2.931889e-02	-1.338971268	1.805800e-01
-9.467478e-01 3.360166e-02	-28.175629271	1.163298e-174
-1.045414e-02 2.899762e-02	-0.360517209	7.184604e-01
	-1.261828e-02 3.246055e-03 -4.653209e-01 1.708184e-02 2.718150e+00 3.827388e-02 8.555001e-01 9.194224e-02 4.680380e-01 7.637136e-02 5.785887e-01 5.833364e-02 3.553557e-01 8.167675e-02 7.507830e-01 1.692607e-01 7.673648e-01 6.481259e-02 9.688841e-01 4.085208e-02 7.973526e-02 1.033779e-01 7.869644e-01 5.272923e-02 1.474921e+00 2.005568e-01 1.780722e+00 1.799206e-01 4.919335e-01 2.108620e-01 1.235626e+00 2.077614e-01 9.081829e-01 2.867224e-01 1.433089e+00 6.757172e-02 1.307498e+00 8.134272e-02 2.645806e-02 1.931781e-01 -4.371626e-02 1.382980e-01 -5.040993e-02 1.360863e-01 -2.940801e-02 1.385513e-01 8.438813e-02 1.357552e-01 2.316744e-01 1.373796e-01 3.460038e-01 1.414568e-01 5.115668e-01 1.376778e-01 6.309918e-01 1.447731e-01 -2.470783e-01 1.737485e-02 6.572466e-05 3.353871e-05 -3.925715e-02 2.931889e-02 -9.467478e-01 3.360166e-02 -1.045414e-02 2.899762e-02	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

relevgCatholic, Evg.	-3.466496e-01 5.049612e-02	-6.864875540	6.654925e-12
relevgMormon	-1.096695e+00 8.881556e-02	-12.348001341	4.993663e-35
relevgOthodox	-1.475628e-01 9.759680e-02	-1.511963921	1.305430e-01
relevgOth. Christ., N.E.	-2.116015e-01 3.665148e-02	-5.773340708	7.771507e-09
relevgOth. Christ., Evg.	-7.876300e-01 3.363480e-02	-23.417116891	2.860626e-121
relevgJewish	5.817882e-01 4.947343e-02	11.759609982	6.302475e-32
relevgMuslim	4.256077e-01 7.534697e-02	5.648637240	1.617247e-08
relevgBuddhist	4.689388e-01 9.139552e-02	5.130872663	2.884020e-07
relevgHindu	4.583645e-02 1.211842e-01	0.378237851	7.052539e-01
relevgAtheist	1.452241e+00 5.030310e-02	28.869804633	2.859019e-183
relevgAgnostic	1.140053e+00 4.520885e-02	25.217470445	2.576960e-140
relevgNothing	4.965827e-01 3.148643e-02	15.771323001	4.901225e-56
relevgOther	3.973616e-02 4.643733e-02	0.855694323	3.921669e-01
relevgUnknown	-3.626366e-01 2.407865e-01	-1.506050419	1.320542e-01
household_income\$15,000 to \$19,999	3.057685e-02 6.260988e-02	0.488370967	6.252871e-01
household_income\$20,000 to \$24,999	1.823627e-04 5.294148e-02	0.003444609	9.972516e-01
household_income\$25,000 to \$29,999	4.879887e-02 5.387391e-02	0.905797787	3.650429e-01
household_income\$30,000 to \$34,999	8.054208e-02 5.485620e-02	1.468240240	1.420390e-01
household_income\$35,000 to \$39,999	-2.972582e-02 5.076503e-02	-0.585557019	5.581732e-01
household_income\$40,000 to \$44,999	-5.621179e-03 5.414151e-02	-0.103823837	9.173091e-01
household_income\$45,000 to \$49,999	-1.947810e-02 5.319489e-02	-0.366164834	7.142421e-01
household_income\$50,000 to \$54,999	-1.566963e-02 4.898948e-02	-0.319857015	7.490767e-01
household_income\$55,000 to \$59,999	-8.376806e-02 5.559679e-02	-1.506706653	1.318859e-01
household_income\$60,000 to \$64,999	-7.969349e-02 5.684596e-02	-1.401919920	1.609392e-01
household_income\$65,000 to \$69,999	-1.299912e-01 5.636851e-02	-2.306095007	2.110532e-02
household_income\$70,000 to \$74,999	-1.072178e-01 5.533163e-02	-1.937731097	5.265604e-02
household_income\$75,000 to \$79,999	-1.094182e-01 5.365122e-02	-2.039435851	4.140655e-02
household_income\$80,000 to \$84,999	-1.572307e-01 5.756642e-02	-2.731291128	6.308672e-03
household_income\$85,000 to \$89,999	-1.323509e-01 6.176854e-02	-2.142690428	3.213796e-02
household_income\$90,000 to \$94,999	-1.618705e-01 6.667101e-02	-2.427899432	1.518655e-02
household_income\$95,000 to \$99,999	-1.554340e-01 5.448507e-02	-2.852780926	4.333849e-03
household_income\$100,000 to \$124,999	-2.431114e-01 4.403914e-02	-5.520348582	3.383278e-08
household_income\$125,000 to \$149,999	-1.998367e-01 4.645846e-02	-4.301405438	1.697182e-05
household_income\$150,000 to \$174,999	-2.221089e-01 5.341044e-02	-4.158528769	3.203039e-05
household_income\$175,000 to \$199,999	-3.572941e-01 6.091996e-02	-5.864976256	4.491970e-09
household_income\$200,000 to \$249,999	-3.393312e-01 5.697539e-02	-5.955749353	2.588828e-09
household_income\$250,000 and above	-3.490339e-01 5.618380e-02	-6.212358500	5.219518e-10
household_incomeUnknown	-4.090133e-02 5.152847e-02	-0.793761782	4.273341e-01
employmentHomemaker	-2.367922e-01 3.460601e-02	-6.842514431	7.781506e-12

employmentRetired	1.311158e-01	2.960350e-02	4.429065334	9.464235e-06
employmentUnemployed or temporarily on layoff	2.993091e-02	3.649092e-02	0.820228861	4.120857e-01
employmentPart-time employed	-7.767324e-03	3.101188e-02	-0.250462859	8.022294e-01
employmentPermanently disabled	1.886618e-01	4.475285e-02	4.215637427	2.490737e-05
employmentStudent	3.473949e-01	4.688876e-02	7.408916382	1.273356e-13
employmentSelf-employed	-5.382114e-02	3.485608e-02	-1.544096266	1.225650e-01
employmentOther:	5.906925e-02	9.717308e-02	0.607876630	5.432693e-01
employmentUnknown	5.956266e-01	4.090254e-01	1.456209326	1.453348e-01
orientation_groupGay man	1.506780e+00	7.309985e-02	20.612632917	2.114134e-94
orientation_groupLesbian / gay woman	1.221894e+00	1.011684e-01	12.077829844	1.383224e-33
orientation_groupBisexual	5.832048e-01	4.505217e-02	12.945097204	2.504460e-38
orientation_groupPrefer not to say	1.421825e-01	7.248301e-02	1.961597618	4.980935e-02
orientation_groupOther	4.165460e-01	8.820352e-02	4.722555430	2.328996e-06
in_unionI formerly was a member of a labor union	-1.013001e-01	3.465958e-02	-2.922714992	3.469940e-03
in_unionNo, I have never been a member of a labor union	-2.886266e-01	2.941536e-02	-9.812104586	9.986368e-23
in_unionUnknown	-7.651275e-02	1.318677e-01	-0.580223400	5.617640e-01
household_gun_ownerGun Household	4.198462e-01	2.723224e-02	15.417248825	1.253309e-53
household_gun_ownerNo Gun	9.461023e-01	1.989838e-02	47.546709268	0.000000e+00
household_gun_ownerUnknown	4.172701e-02	4.684491e-02	0.890748005	3.730644e-01
attr(,"class")				
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[1] Inf				
attr(,"nobs")				
[1] 241201				
attr(,"logLik")				
'log Lik.' -120551.6 (df=143)				

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