

CHAPTER 3

Context Sensitivity and Biases in Political Science: the Case of Economic Voting Studies in the Journal *Electoral Studies*

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Introduction

There are two commonplaces in political science that have rarely been put to the test. The first of these is the fact that researchers' and editors' interests are guided by major contemporary political events. The second is that positive, statistically-significant results are more likely to be published than negative findings. Both facts may have important consequences, not only for the definition of what is published and how, but also for how theory develops. In this chapter these potential problems are considered to be the consequence of a lack of awareness within social sciences of the impact of context. On the one hand, I will show how the political context may have an impact on the content of studies. On the other hand, the chapter will address how the context in which researchers develop their careers may have an impact on their academic production. In so doing, three different types of potential biases related to this sensitivity to context will be mentioned: selection, specification and publication biases.

In order to show the pitfalls caused by the impact of the context on research, I will focus on a specific field of political science – economic voting theory – through an analysis of those articles published on this topic in the journal *Electoral Studies* since 1984. This subfield of voting behaviour theory is part of a broader trend in political science that relies on positivist standpoints. Its main purpose is the finding of law-like causal statements based on deductive logic and empirical observations (Neuman 2000). Quantitative research, often seen as “value -free”, aims at the study of phenomena which are assumed to exist independently of our knowledge and not to be socially created (Marsh and Furlong 2002; McNabb 2004). In this chapter I show how, paradoxically, the academic production of this type of research is indeed socially

created and that it is therefore to a certain extent contingent upon the interaction between individuals – researchers and editors – and the broader political context.

1. The impact of the context and its consequences

Several contributions to this book reflect how academic production can be influenced by the context in which it occurs (see Chapters 1, 2 and 7). However, the consequences of such an influence may not be so straightforward to grasp. In order to improve our knowledge about a lack or excess of dependency on context we need first of all to clarify what we understand by the term. Context can be interpreted as the set of events that constitute at the same time the object of study and contemporary socio-political events. This is exemplified in Chapter 1 where Jadot shows how the ratification of the Maastricht Treaty and the strengthening of European Integration entailed an increase in the attention the journal *West European Politics* devoted to European topics. In a similar vein, Wanneau's chapter reflects how different political episodes have framed the evolution of the concept of international security. However, context can also be considered as the frame within which researchers develop their studies, such as those organizational structures that frame academic activity (universities, research centres) or institutional dynamics (how researchers interact and knowledge is disseminated). In this sense, Close's detailed account of the evolution of research into political parties in this book reflects how growing international academic collaboration has facilitated the gathering and availability of comparable data on parties and political institutions, which has led to an increase in the number of large N analyses in this field. Thus, since it is hard to imagine a researcher or an editor who is completely independent from the context in which they find themselves, the question this chapter addresses is how and to what extent context has an impact on the content of published studies.

The fact that the objects of study in political science are often contemporary political events is something that appears to have scarcely been analyzed. Even if both the publishers' inclination to publish things at the apex of interest of certain coetaneous political events and the researchers' will to study them are completely understandable, these decisions may entail important consequences. In this sense, Barbara Geddes (2003) argued that the failure to generate much theory in studies of regime change was partly due to an eagerness to publish about the political events of the time. According to this scholar, researchers' interest in this type of regime change started to decline precisely when enough experience had been accumulated to start making significant improvements in theory development. This claim goes in line with Close's findings in Chapter 2 about the consequences of the fall of the Berlin Wall in 1989, which entailed a decrease in scholarly attention towards communist regimes and a shift towards the study of the institutional conditions for democratic transition.

However, this may not be the only drawback caused by the influence of contemporary political events in academic production. If attention to certain topics is contingent upon the political context, this will also affect the way in which theory develops. In the first place, this is because the cases under analysis will be determined by what is happening at that moment and not only by theoretically-driven arguments. Secondly, it is because the type of causal arguments and explanatory factors may also

be affected by the cases that attract scholarly attention. In this sense, failing to take account of the context when assessing a theory may lead to erroneous conclusions, because causal dependence may be contingent upon that context. For instance, let us suppose that a researcher hypothesizes that there is a relationship between event A and event B, such that every time there is A, B would occur. Before stating that A causes B, she should also search for the conditions where this relationship may hold. These conditions affect both the selection of cases that may be explained by the theory and the selection of explanatory factors which may account for the outcome under consideration across a set of cases.

On the one hand, the researcher has to test whether the case or cases under analysis reflect the entire range of possibilities of the existence of A and B in order to be able to draw a solid conclusion about the relationship between the two. If this is not the case, the conclusions will be likely to suffer from context sensitivity in the selection of cases, which may be thought of as a type of selection bias. In the methodological literature, this type of bias usually refers to a non-random selection of cases which generates inferences that are not statistically representative of the population (Collier 1995). This is therefore related only to the selection of cases and not to publishers' decisions. However, if in a certain subfield, the majority of studies only focus on the analysis of a particular set of cases while at the same time defending the generalizability of their conclusions, it would be easy to say that this subfield is in general terms potentially biased, since its hypotheses have not been tested in other settings.

On the other hand, when a theory calls upon a set of explanatory factors to explain an outcome of interest or a certain causal mechanism, these factors need to show enough variation within the case or across the cases under scrutiny before one can claim that they are really relevant to the explanation of the outcome or mechanism. It is difficult to show that a relationship between cause and effect exists if the cause (or the explanatory factors) shows little variation within the cases under analysis (Geddes 2003: 119). When this happens, there is an erroneous specification of the explanatory model based on a failure to adapt the hypotheses and causal explanations to the context that is studied. In these cases, the causal argument may suffer from what I term a specification bias, which is another of the consequences that context sensitivity may entail. In order to test a particular set of hypotheses, the impact of the context on case selection and explanatory factors are crucial. We cannot claim that a causal relationship holds if we have not controlled for the possibility of this kind of bias.

Apart from these drawbacks, the context may also have another perverse effect on the development of a theory. I refer here to the context in which academic production is developed. For instance, it has been shown that the structure of incentives within which researchers develop their work has an influence on their creativity, that is on the rate and direction of scientific exploration (Azoulay et al. 2011). However, the context may also deliver unwanted consequences. In this sense, the second question this chapter addresses concerns what is commonly known as publication bias. This "arises whenever the probability that a study is published depends on the statistical significance of its results" (Scargle 2000). Publication bias is a major issue in scientific

production¹ because if the publication decisions of academic journals are based on the statistical significance of the results, then the overall findings of the published literature may be biased and thus not reflect an accurate measure of the true effects of the variables, threatening the validity of the findings (Gerber and Malhotra 2008).

In many scientific disciplines, publication bias has a high saliency and one can easily find examples of studies analysing this issue in fields such as medicine or psychology (Gerber and Malhotra 2008). Unfortunately, publication bias has rarely been studied in the field of political science (Gerber and Malhotra 2008), but the discipline can nevertheless benefit from advances in other fields whose first insights date from the 1950s (Bakan 1966; McNemar 1960; Medawar 1963; Melton 1962; Sidman 1960; Sterling 1959). After all, if authors, editors and referees prefer results that confirm theory over those which are contradictory or inconclusive, controlling for this kind of bias is – or at least, should be – a major issue for any literature review in every field of scientific inquiry (Ludvigsen 2010).

In the first part of this chapter I will present the type of analysis that has been performed to test for the existence of these types of biases. The advantages of this approach compared to traditional narrative reviews will be highlighted. In the second part, I will present the field – economic voting theory – which has been scrutinized for the purposes of this chapter, together with its main characteristics. Once the basics of this theory have been presented, the hypotheses linked to each bias will be formulated. The intention is to put forward the idea of context sensitivity and the biases that may be linked to it and how these may have an impact on the development of the field of economic voting. After some methodological notes, the presentation of results will focus on a test of the hypotheses using those articles on economic voting which have been published in the journal *Electoral Studies* in the last 28 years.

2. The method: systematic analysis and its advantages

The existence of these potential biases cannot be discovered merely by looking at each individual study separately, which is why this chapter analyses the existence of biases and their effects on the overall evolution of publications appearing in a specific journal. It is therefore important to keep in mind that the conclusions drawn from this chapter do not belittle either the authors or their arguments. Moreover, my intention in any case is to obtain conclusions likely to be generalizable to other journals. Instead, my aim is to find out if the evolution of a topic in a journal is affected by any of these potential biases, regardless of whether this has been consciously or unconsciously caused by editors' decisions or by researchers themselves when they decide to address a particular topic. After all, researchers try to conduct their investigations while drawing to the best of their ability upon their own know-how, capabilities and understanding of conventions. It is at the intersection of individual researchers, editors and the general context in which research takes place that these biases may arise.

In order to analyze the existence of these potential drawbacks I have performed a systematic analysis of those articles which deal with economic voting hypotheses

¹ Other names for publication bias are the availability bias (Hunter and Schmidt 2004), file-drawer bias, retrieval bias, and source bias.

in the journal *Electoral Studies*. While a standard narrative literature review may be useful to track and summarize the principal findings and the development of a subfield, this is not suited to testing for the existence of the above-mentioned type of biases. Literature reviews are often drawn up from the perspective of a specific research question linked to the literature, with the review revealing the strengths and weaknesses of findings in that specific research area. At the same time, systematic analyses such as the study of the content of a journal provide additional insights. They provide a more analytical and disciplined perspective on research findings and at the same time enable the discovery of relationships between studies that may be obscured in standard literature reviews (Lipsey and Wilson 2001). Systematic analyses of research findings have the advantage of being able to include a larger number of studies than literature reviews and, more importantly, they are replicable and hence open to being refuted and improved. Finally, these systematic analyses can compensate for the fact that narrative reviewers “may ignore or discount statistical results when encountering inconsistent findings and possibly overemphasize the results when the findings are coherent” (Ludvigsen 2010; Leamer and Leonard 1983; Stanley and Jarrell 1989).

3. The theory put to the test: economic voting

Elections constitute the heart of representative democracy, which can be defined as “a system of governance in which rulers are held accountable for their actions in the public realm by citizens acting indirectly through the competition and cooperation of their elected representatives” (Schmitter and Karl 1991: 76). Consequently, accountability is one of the core elements of modern representative democracies (Anderson 2007; Riker 1965; Powell 2000). Economic voting theories have built on this idea of accountability and representative democracy. “To support the Ins when things are going well; to support the Outs when they seem to be going badly, this...is the essence of popular government” (Walter Lippman quoted in Powell 2000: 269). In the same vein, the main hypotheses of economic voting are based on principles of punishment and reward: voters punish their government when the economy goes bad and reward them when the economy goes well. According to the postulates of this theory, economic voting is considered to be an individual-level phenomenon dealing with the impact of economic perceptions or situations on the probability of voting for incumbents or for any party (Duch and Stevenson 2006).

This field has attracted both political scientists and economists, who analyse elections by means of econometrics. It has traditionally been studied by means of either popularity functions² or vote functions³ (Lewis-Beck and Stegmaier, 2000), generally known as the VP functions. The former are defined as support for the government or for the parties in the polls, while the latter refers to changes in the vote

² The P-function was introduced simultaneously by Mueller (1970) and by Goodhart and Bhansali (1970).

³ The V-function was introduced by Kramer (1971).

for incumbents or for parties. These VP functions include both economic and political variables as explanatory factors for the vote choice (Nannestad and Paldam 1994)⁴.

The choice of economic voting theory for this chapter was made for several reasons. On the one hand, hypotheses derived from this theory look for parsimony. On the other hand, these hypotheses are usually investigated through quantitative analyses and the statistical models applied share a common structure which allows comparison of the models and their results. I have chosen one specific journal which has focused on studies of elections and voting behaviour since 1984, *Electoral Studies*. The first article on economic voting in this journal dates from 1984, resulting in an evolutionary time-span of 28 years of publications on economic voting.

To sum up, the principal hypotheses I shall test in this article are as follows. The first hypothesis claims that publication of articles on economic voting theory is influenced by the general economic context. The more salient the economy is at a particular moment, the more articles will be published on this subject. The second hypothesis refers to the existence of selection bias. The results of the economic voting literature, as published by *Electoral Studies*, may not be statistically consistent due to a general bias in the selection of cases: they are too sensitive to the context. Researchers are expected to tend to look into cases involving economic crisis. The third hypothesis focuses on the explanatory factors' lack of variance and the risk of specification bias. If this turns out to be the case, the results of the economic voting literature, as published by *Electoral Studies*, would suffer from a bias due to the choice of independent variables: they are not sensitive enough to the context. Finally, publication bias will be examined. Several authors have already claimed that the findings in this literature show evidence (Gerber and Maholtra 2008) or signs (Ludvigsen 2010) of publication bias. I expect that context sensitivity may cause an overrepresentation of significant positive findings.

3.1. Methodological notes

Before presenting the findings of this research, some brief methodological notes are required. The scope of this analysis is the entirety of the articles that have been published in the journal *Electoral Studies* since 1982. Articles have been chosen following the logic of Boolean operators. The conditions for inclusion in the sample under analysis were that articles had to include the words “economic voting” or “economic vote” or include at least one of the following words: “sociotropic”, “egotropic”, “retrospective” or “prospective” associated with the word “economy” in the title, in the keywords or in the abstract⁵. The sample included 59 articles which covered the time period between 1984 and 2012 (The whole sample of studies is included in the Appendix).

In the following pages I will check for the existence of some of the abovementioned biases in this sample. Firstly, I will explore how publications related to economic

⁴ For literature reviews of economic voting theory see Paldam (1997), Norpoth et al. (1991), Norpoth (1996), Lewis-Beck (1988).

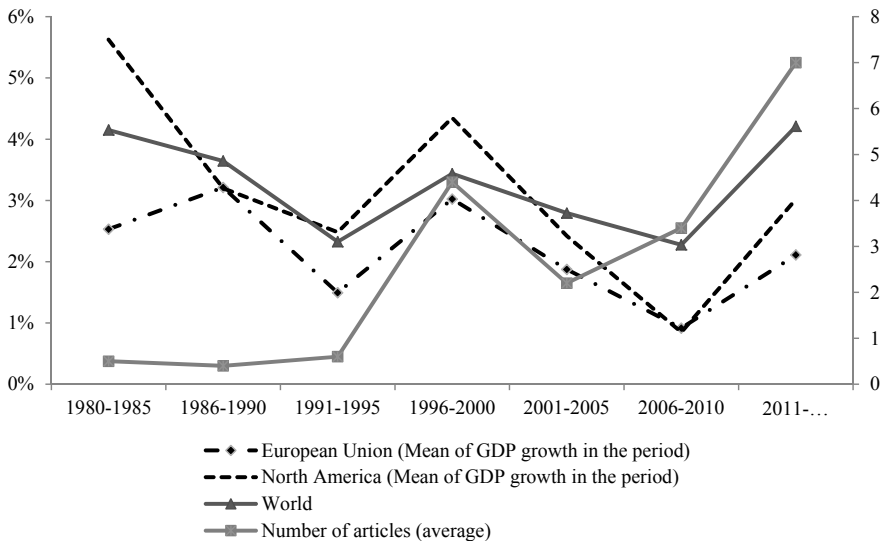
⁵ The terms “sociotropic”, “egotropic”, “retrospective” and “prospective” were chosen because before 1995 the expression “economic voting” was in less common use and many articles addressing the issue did not include this expression in the text.

voting theory have evolved over time and to what extent the number of published studies is contingent upon the broader economic context. Then I will analyse whether these studies are sufficiently sensitive to variations in the context. Two aspects will be considered: the selection of cases and the selection of independent variables. Finally, the existence of selection and specification biases will be linked to the existence of publication bias.

3.2. Changes in treatment of the issue in the journal: an unbiased evolution?

The first studies on the relationship between economy and electoral behaviour were carried out in the early 1970s (Goodhart and Bhansali 1970; Mueller 1970; Kramer 1971). Since then, an astonishing amount of work has been undertaken in this field. The evolution of the publication of studies of the field in *Electoral Studies* has proceeded in line with the evolution of the field in general. In the 1970s, most of studies relied upon aggregate time series of vote results and economic indicators, such those based on Box-Jenkins models. At the end of the decade, the publication by Fiorina of two crucial articles (1979; 1981) led to a new period in the study of the relationship between the economy and elections. The term “economic voting” appeared for the first time in an article (Fiorina 1978) and electoral surveys thereafter became the main data sources. The 1980s also saw the emergence of two of the biggest controversies within the field: that between egotropic and sociotropic voting, (whether the most important factor explaining vote choice was the perception of the households’ economy or of the national economy), and that focusing on the effect of time (retrospective and prospective economic voting).

Figure 3.1: Five-year period average number of articles by year and GDP growth (mean of growth in percentage terms %) (N=56)



Note: The right-hand axis reflects the number of articles. The left-hand axis reflects the variation in the GDP mean.

Economic voting has been considered an established field in the study of electoral behaviour since the 1990s, although within the pages of *Electoral Studies* interest in the field has been far from linear. The distribution of the articles across time reflects a clear relationship between trends in economic growth and the space the journal devotes to the field of economic voting. In 2000, a special 18-chapter volume was devoted to the issue based upon a conference held in 1998, in the context of the Asian financial crisis and other major crises in countries such as Argentina and Brazil.

Even if research often develops in a wavelike fashion (Nannestad and Paldam 1994), this non-random distribution of the publication of the studies is puzzling and leads us to the second hypothesis of this chapter. The hypothesis refers to the possibility that researchers may be paying more attention to countries in the throes of economic crises. If this second hypothesis is confirmed, this would entail isles attention being given (whether by editors or by authors) to one core aspect of the theory: that voters reward incumbents when they provide good economic outcomes (Nannestad and Paldam 1997). We can find in the literature numerous attempts to explain why voters may react to poor government performance but not to good performance⁶. This has been called the grievance asymmetry. This lack of attention to prosperous economic periods has been explained through the argument that for some issues, such as economic development, good performance is more likely to go unnoticed (Yang and Holzer 2006) since bad news are usually more salient.

Nevertheless, it is important to consider variations in the economy across or within the cases examined because these may impact on the results. Kramer (1983) posited that a cross-sectional survey was not an appropriate method to deal with economic voting. He argued that there is no way to measure the impact of changes in the economy on voters' voting decisions when no real variance in the economic factors can be taken into consideration. When studies are based on one cross-sectional survey, there is only one economy being reported at one point in time. Yet the same problem would arise if studies are based on several cross-sectional studies but no significant changes in the economic conditions have taken place.

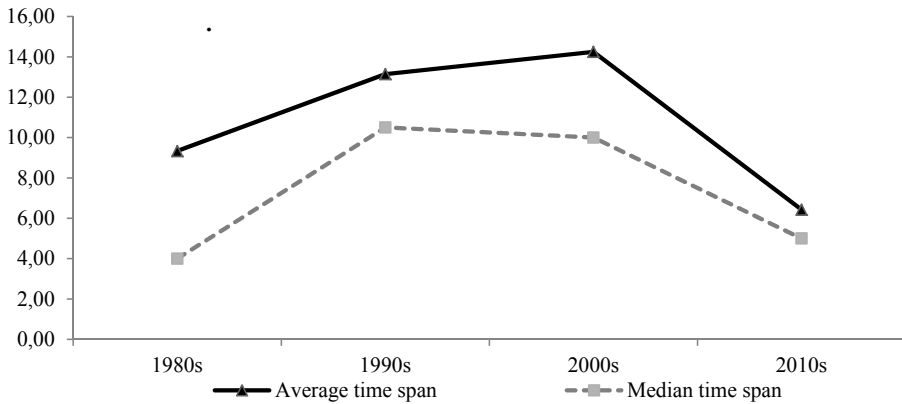
In order to test this hypothesis I have established a measure of what I define as "economic crisis context" that allows us to apply a homogeneous condition for all the studies included in the sample, both for cross-country and case studies and for cross-sectional and time-series approaches. I define economic crisis context as a dynamic concept. It is measured on the basis of the differential rates of increase from time $t-1$ to time t in unemployment and inflation rates. The underlying rationale is that people are more likely to react to changes in the economy and not to high but constant rates of unemployment or inflation. I have created a dichotomic variable, coding "1" for those studies whose sample of countries or periods under analysis undergo an increase in time t of more than 10% in unemployment or a 5% in inflation, and "0" for the rest. I have also created a variable which contains information on whether the studies focus their analyses on dynamics across time or across several elections or they analyse only

⁶ Lau (1985) focuses his explanations on basic psychological behaviour, while Corden (1986) gives an account of the grievance at work in economic policy making, and Krueger (1990) looks at trade policies.

one election, regardless of whether they have studied this election at two points in time by means of pre- and post-election surveys. This is because the main economic indicators (objective and subjective) are not likely to change substantially over such short periods of time.

The great majority of the articles published in *Electoral Studies* analyse whether there is economic voting under economic crisis conditions as I have defined them above (89.4%)⁷. However, it is worth noting that a third of the articles (34%) do not control for the effects of different economic conditions because they only analyse periods of time characterized by economic crisis (23.4%) or periods without crises (10.6%). The grievance asymmetry is therefore overlooked. The same amount of attention has not been paid to this aspect of the theory, whether by the authors or the editors. The same happens as regards testing the impact of variance in the economy (or the perceptions of the economy) on voting decisions. In the majority of cases only contexts of poor economic conditions are considered, while there is an overwhelming majority of cross-sectional studies (72.3%) and the time span covered by the articles shows a declining trend over the different decades (see Figure 3.2). Studies covering the longest time spans are concentrated in the 1990s, after which a decrease in the median number of years occurred. This was not because those articles with a longitudinal perspective took account of a fewer number of years but because a new wave of cross sectional studies emerged which only focused on the analysis of a single election. This trend is even clearer after 2010, with a great deal of attention being paid to the impact of the 2008-2012 economic crisis on vote behaviour.

Figure 3.2: Time-span covered by the articles



Note: The vertical axis reflects the number of years covered by the articles in the sample. The horizontal axis reflects the different decades.

⁷ The sample contains 47 articles.

The third hypothesis I put forward concerns the sensitivity of the models to the context of the phenomenon under study. At the macro level⁸, researchers study the impact of indicators such as unemployment, inflation or growth on the evolution of electoral results or popularity scores. My third hypothesis thus addresses how well models are adapted to the case being studied. If variables showing no significant variation across the times of analysis are included in models, their results may suffer from being erroneously specified. While each study considered separately may test the explanatory factors proposed by the general theory, a failure to adapt these factors to the context can hinder innovation, lead to biased conclusions and jeopardize the validity of the overall findings.

I will firstly present the findings of an analysis which looks for the existence of these biases in publications examining the impact of macroeconomic indicators on citizens' voting choices. The most important indicators used in this field are inflation and unemployment rates. I begin by looking at the evolution of the use of these indicators in this field, the overall strength and statistical significance of these variables in the models published in *Electoral Studies*, and their possible dependency upon context. On the basis of this data, the existence of the three different types of biases in the publications focusing on this kind of factors will be assessed.

3.3. *The big two*

One of the main hypotheses of economic voting theory is often called the big two hypothesis. This refers to the study of the impact of unemployment and inflation in how voters evaluate their governments' performance. Nearly 40% of the studies analysed for this article include both variables in their models, whereas economic growth, mainly as GDP per capita, is only included in 10% of the models. The infrequent use of GDP as explanatory factor can be attributed mainly to the problems of multicollinearity which may appear with the other two variables.

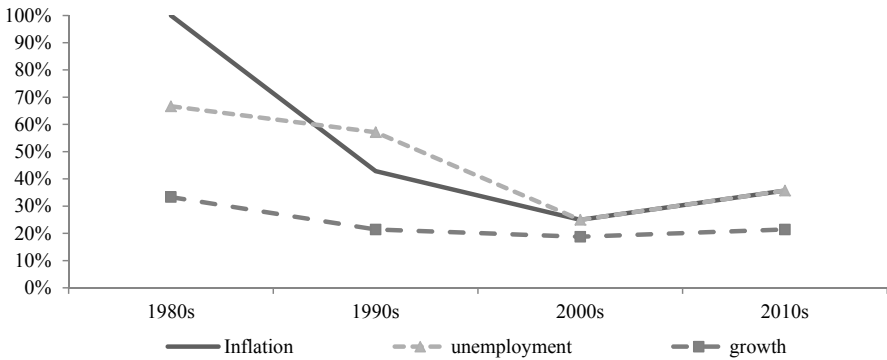
Given that since the 1990s rates of inflation have been marginal in the West, it is understandable that the number of articles including this variable has decreased over time (see Figure 3.3). However, I consider that this decline is more attributable to an increase in the use of survey data and increasing attention being paid to citizens' perceptions of the economy⁹, to the detriment of objective economic indicators. What is more remarkable in these findings is that most of the models focusing on the

⁸ When studying the degree to which economic voting takes place at micro level, the focus is on the individual level factors that influence voting decisions. Consequently, surveys are the main source of information. Individuals are asked about their perceptions of the economy in general and their personal economic situation, with questioning focusing both on voters' perceptions about the past and about their future prospects. These aspects of the theory are not considered in this chapter.

⁹ Economic voting studies have increasingly focused on the question of what voters have in mind when judging the economic performance of a government. It has been debated whether voters take into account their own economic situation (egotropic) as the frame of reference or if instead they are guided by their perception of the national or general economic situation (sociotropic). A second debate has centred on whether voters consider past experience (retrospective voting) or future expectations (prospective voting).

relationship between objective economic indicators and voting patterns include both inflation and unemployment data, regardless of when the models were published. This is also the case even in those studies that consider the crisis of 2008-2012, a period which has been characterized by low levels of inflation but a severe increase in levels of unemployment. This may be considered as a sign of specification bias due to a lack of context sensitivity. As Lewis-Beck and Paldam (2000) have pointed out, voters may pay more attention to different indicators at different times and the “selection of the ‘wrong’ economic variables will generate inconsistent results”.

Figure 3.3: Number of articles including in the models growth (as increase in GDP per capita), unemployment rate and inflation rate as independent variables



I have analysed a total of 130 statistical parameters included in the models referring to inflation, unemployment and growth. Among meta-analysis methods, the counting method is probably one of the weakest because it cannot take account of important issues such as error or strength. In this sense, Glass (1976) argued that simple summary and vote-counting are methodologically too weak for the complexity of the problem and that in order to carry out appropriate integrated analyses of research findings, the same statistical methods that are used in the individual studies should be applied. However, given the variation as regards the countries under analysis, as regards the independent variables that are used (often idiosyncratic ones such as the impact of the Falklands War on British voting behaviour), or even the evolution of statistical techniques across time, a straightforward statistical analysis remains unachievable with the type of data used for this chapter.

Table 3.1: Proportion of economic parameters in those models analysing vote for incumbents

Proportion of significant parameters	Parameters of inflation	Parameters of unemployment	Parameters of growth
0.05	8.3% (3)	11.5% (3)	25 % (2)
0.01	8.3% (3)	0 % (0)	0 % (0)
0.1	2.8 % (1)	3.8 % (1)	25 % (2)
Non-significant	80.6 % (29)	84.6 % (22)	50 % (4)
Total	100 % (36)	100% (26)	100 % (8)
	$\mu=-0.17$	$\mu=0.15$	$\mu=0.71$
	$\sigma=0.77$	$\sigma=1.68$	$\sigma=0.58$

In Table 3.1 I have included all the coefficients related to three economic indicators from those models that only try to explain the vote for incumbents. The table shows the distribution of parameters according to their degree of statistical significance. We can observe how inflation and unemployment are the more effective variables in explaining vote choice (regardless of whether this is a vote function or a popularity function), but it is worth noting that 80.6% and 84.6% respectively of the parameters remain non-significant. Besides, only 59% of parameters concerning inflation and 44% of parameters concerning unemployment yield results that are coherent with expectations, that is that voting for incumbents is less likely when inflation or unemployment rates are higher. Coherent with these mixed results are the averages of both parameters which show the weakness of the relationship between these variables in light of all the published parameters. In this sense, it is important to note that unemployment shows a positive correlation. Notwithstanding the impact of other variables on the models, this does not confirm the predictions of economic voting theory since it would mean that higher unemployment rates were related to a greater probability of voting for incumbents. Furthermore, taking the median as a more consistent measure, both sets of variables produce only weak overall results: parameters concerning inflation show a median of -0.035 and those concerning unemployment reflect a median of 0.157

In order to test whether these fairly weak results are due to the selection of cases I have looked at the relationship between these parameters and the context of the samples concerned. The aim is to check whether there is a relationship between the results and the fact of including cases (or periods of time) that include both economic crisis, as I have defined it above, and economic development, in order to control for economic change due to time effects. I discovered that 83.3% of the articles including inflation as independent variable looked at time periods that included good and bad economic times, and those including unemployment under the same conditions constituted 84.2% of the sample (n=16). Table 3.2 reflects how the significance of the parameters is distributed according to the type of contexts the studies take into account. Whereas in the 1990s, nearly 86% of the articles included cases of economic crisis and cases where there was no crisis, since 2010 this percentage has dropped to 50%, specially due to the attention the journal has paid to studies focusing only on those countries that have been especially hit by the 2008-2012 crisis.

Table 3.2: Evolution of the significance of the parameters on inflation according to the context under analysis per decade (N=60)

	The sample includes non-crisis context	The sample includes crisis context
1980s	33.3%	66.7%
1990s	14.3%	85.7%
2000s	37.5%	62.5%
2010s	50.0%	50.0%

Table 3.3: Evolution of the significance of the parameters on inflation per decade (N=60)

	Non-significant	Level of significance 0,05 or inferior
1980s	87.50	12.50
1990s	81.82	18.18
2000s	62.50	37.50
2010s	25.00	75.00

However, looking at how results have been published across time, I have found that the percentage of positive results increases with time. In Table 3.3 I have remained agnostic about the models. There is a clear trend towards including only positive and significant results in the published studies. As this table shows, whereas in the 1980s the percentage of positive and significant parameters referring to inflation was 12.5%, in the 2000s the percentage rises to 37% and in the following decade to 75%¹⁰. These findings are puzzling, since in OECD countries since 1998 their annual differential rates show a stable trend (below 5% inter-annual change). In consequence, the inflation variable is from this perspective a factor that would not be expected to deliver positive results, or at least not so frequently. Besides, the number of years taken into consideration is on average much lower in the 2000 decade than ever before, which makes this finding even more surprising. The existence of such a trend shows that the likelihood of being published is at least partly related to the positiveness and significance of the results.

Conclusions

Research in political science is often intimately linked to the broader political context, as is shown in several contributions to this book and often the topics that are studied and how they are analysed are also contingent upon the institutional incentives and constraints of the academic profession (see for instance the consequences of international collaboration in political party research found by Close in Chapter 2). Through a systematic study of the evolution of some of the main hypotheses of economic voting theory in articles published by *Electoral Study* I have found several shortcomings linked to a lack or excess of dependence from the context. This would have been difficult to discover by means of an analysis of single studies or through narrative reviews. In so doing, I have demonstrated that there are some worrying trends in the last decade. In the first place, studies tend to concentrate their analysis on cases affected by economic crisis, which may be considered a selection bias. In other words, I have found that the body of articles published in this journal overlooks the grievance asymmetry hypothesis by avoiding analysis of cases affected by good economic conditions. Besides, the time spans considered in the articles tend to be smaller as time passes by, which may mean that studies only analyse the economy as a short-term determinant of the vote. In addition, and even more importantly, any

¹⁰ 75% of the parameters on inflation published in 2010 were positive and significant, but the time-span covered by the sample – only three years (2010, 2011 and 2012) – is too small to draw conclusions.

variance in the economic indicators or in perceptions is likely to suffer from a lack of variation across smaller periods of time. This may mean that results are less consistent and more susceptible to change when the factors within the model are altered.

Furthermore, I have found that there is a paradox in the evolution of these studies. On the one hand, the studies seem to be too context-sensitive in the selection of cases (case selection bias), but on the other hand, they seem not to be sensitive enough to the context when selecting the independent variables (specification bias). Inflation and unemployment may be good predictors in the general theory, but researchers should be more aware of the evolution of these variables over the long term. The inclusion of both variables in their models when only one of these shows a significant change, whereas the other remains stable for decades (such as inflation in the West) may detract from the strength of their conclusions through the inclusion of non-relevant variables within the model. Moreover, the results presented in this chapter show that there are signs of a second alarming trend: the publication of studies seems to be increasingly linked to the number of positive and significant empirical results, which may be driving an overall publication bias in the results for this subfield.

Some solutions could be envisaged to minimize the impact of these biases in quantitative research. Firstly, case selection and the time span of studies should be as carefully and theoretically justified as ought to be the case in qualitative research. Even if the focus is at the individual level, the existence of a relationship between variables should include controls for the absence of variation in the context. The choice of independent factors, while contingent upon the literature, should also be adapted to the case being studied. An absence of variation in the causal factors jeopardizes the validity of any conclusions and should be carefully addressed in quantitative research.

Furthermore, political science needs to be more aware of publication bias and the dangers this may entail. Some researchers have proposed the existence of registries, similar to those used in other sciences, where researchers can put forward their models before data becomes available (Gerber and Malhotra 2008). From my point of view, however, replication still constitutes the major firewall for publication bias in political science (for an interesting discussion on the need for replication see King, 1995). There should be more encouragement for replication and, in this sense, academic journals may become the key actors in this process by encouraging and institutionalizing the replication of the findings they publish.

In conclusion, these results show the need to research in greater depth the evolution of scientific production in published journals. This kind of systematic analysis allows for an evaluation of the shortcomings or pitfalls from which a specific subfield may be suffering, and which may be obscured in narrative reviews. The results I present here suggest that further research should be carried out by analysing the results of quantitative research published in other journals and in other fields of political science in the same systematic fashion. In so doing, it would be possible to discover whether these results are linked to this specific field, as published in *Electoral Studies*, or are symptomatic of a more generalized problem.