

**THE UNIVERSITY OF MANCHESTER - APPROVED ELECTRONICALLY
GENERATED THESIS/DISSERTATION COVER-PAGE**

Electronic identifier: 18301

Date of electronic submission: 09/05/2016

The University of Manchester makes unrestricted examined electronic theses and dissertations freely available for download and reading online via Manchester eScholar at <http://www.manchester.ac.uk/escholar>.

This print version of my thesis/dissertation is a TRUE and ACCURATE REPRESENTATION of the electronic version submitted to the University of Manchester's institutional repository, Manchester eScholar.

“A values based electorate?”

**How do voters in West European Democracies convert
their political values into vote choice preferences?**

*A thesis submitted to the University of Manchester
for the degree of PhD in Social Change in the Faculty of Humanities*

2016

Thomas Ivan Powell Loughran

**Cathie Marsh Institute for Social Research
School of Social Sciences**

Contents

	<i>Page</i>
List of Tables	6
List of Figures	8
Abstract	10
Declaration	11
Copyright Statement	12
Acknowledgements	13
Dedication	13
INTRODUCTION	14
CHAPTER 1 The Role of Values	19
Introduction	19
Section 1 Definitions and Overview of Values Literature	20
Defining values	20
The fragmentation of values research	23
Individual values	24
Core political values	27
Values as dimensions of social change	28
Section 2 The Structure of Political Values	30
The role of constraint	30
The structure and dimensionality of values	33
Section 3 The Structure of Values and Voting	35
The relationship between values and voting	35
Political identity as a mediator of values-voting	39
The significance of left-right identity	40
Section 4 The Context of Values and Voting	43
The impact of political context on values and voting	43
Values and contextual choice approaches	44
Party system effects	47
Conclusion	48
CHAPTER 2 Methods Review of Values Measures	50
Introduction	50
A defence of the latent approach to values measurement	52
Analysis	53
Methodology of methods analysis	53
Results	57
Measures of values	57
Which values are operationalised?	59
How each value group is measured	65
Refinement of the values typology	65
Cross-national analysis	69
Cross-sectional (over-time) analysis	70

	<i>Page</i>
Operationalising Values	70
Implications of methods review	70
Distinguishing values from ideology and attitudes	72
Principles for the construction of latent values measures	73
Conclusion	74
CHAPTER 3 Constructing Latent Measures of Political Values	76
Introduction	76
Research questions	79
Methodology and case selection	81
Results	83
Exploratory factor analysis	83
Pooled CFA model	90
Individual country CFA models	93
Factor scores	100
Measurement invariance	104
Discussion	107
Conclusion	111
CHAPTER 4 Directly Modelling the Values-Voting Relationship	112
Introduction	112
Research questions	114
Model Specification	118
Description of the dependent variable and justification of logistic framework	118
Direct voting modelling strategy	121
Descriptives	124
Results	127
Direct Pooled Model 2008	127
Direct Pooled Model 1990	131
Multinomial models	134
Catholic and Protestant country subsamples	139
Discussion	143
Conclusion	147

	<i>Page</i>
CHAPTER 5 The Role of Left-Right Identity in Mediating the Values-Voting Relationship	149
Introduction	149
Research questions	152
Model Specification	155
Descriptives	159
Results	160
Stage 1 - Pooled Models	160
Stage 2 Catholic and Protestant Subsamples 2008	168
Discussion	173
Conclusion	178
CHAPTER 6 The Influence of Political Context	180
Introduction	180
The influence of political context on the importance of values	183
Research questions	184
Data and Methods	187
Results	189
r^2 findings	189
Party polarisation	193
Effective number of parties	203
Direct and indirect effects	205
GLM model	216
Discussion	218
CHAPTER 7 Values and Voting in Context	221
Contribution	221
Values and context revisited	227
Limitations	232
Concluding Statement	235
Bibliography	237
Appendices	
Appendix 1 List of articles used in Chapter 1 Methods Review	249
Appendix 2 CFA Factor Model Applied to Eastern Europe data	252
Appendix 3 Example of early stage EFA results including Benevolence and Security indicators	253
Appendix 4 Distribution of Measurement Model Indicators 2008	254

		<i>Page</i>
Appendix 5	Distribution of Measurement Model Indicators 1990	255
Appendix 6	Details of values indicators taken from the 2008 EVS data	256
Appendix 7	Example of final CFA Model <i>Mplus</i> Syntax	259
Appendix 8	Descriptive data by country	260
Appendix 9	Details of sample sizes, election dates and Party Families	268
Appendix 10	Breakdown of party information by country, party name, party type and number of cases	269
Appendix 11	1990 Multinomial models	272
Appendix 12	National level results 2008	273
Appendix 13	National level results 1990	281

Word Count = 76,819

List of Tables

	<i>Page</i>
Table 2.1	Percentage of articles by number of different values measures used 57
Table 2.2	Percentage of articles by value measurement type 57
Table 2.3	Complete list of values 59
Table 2.4	Type 1 Social Conservative/Conservation and Type 2 Liberal/Individual 61
Table 2.5	Type 3 Collectivist/Self Transcendence and Type 4 Material/Self Enhancement 63
Table 2.6	Type 5 Postmaterialist and Type 6 Other 64
Table 2.7	Conservative value typology 67
Table 2.8	Liberal value typology 68
Table 2.9	Collectivist value typology 68
Table 2.10	Cross-national and cross-sectional studies 69
Table 3.1	2008 descriptive data 86
Table 3.2	1990 descriptive data 86
Table 3.3	2008 final exploratory factor analysis 88
Table 3.4	1990 final exploratory factor analysis 89
Table 3.5	Final CFA model on 2008 and 1990 pooled data 92
Table 3.6	2008 CFA models by individual country 95
Table 3.7	1990 CFA models by individual country 97
Table 3.8	Summary of Model Fit results by country and year 105
Table 3.9	Model fit results for Multi-Group test of Measurement Invariance 106
Table 4.1	Party Family descriptives 124
Table 4.2	Descriptive data for control variables 126
Table 4.3	Party Family Vote Choice models 2008 128
Table 4.4	Party Family Vote Choice models 1990 132
Table 4.5	Multinomial Party Family Choice Models with Centre Left Party as the Base Category 135
Table 4.6	Multinomial Party Family Choice Model with Centre Party as the Base Category 138
Table 4.7	CFA subsample area models 140
Table 4.8	Party family vote choice models in 2008: Protestant and Catholic country subsamples 142
Table 5.1	Party Family descriptives 159
Table 5.2	2008 Mediation Model highlighting direct and indirect effects 161
Table 5.3	The percentage of the variance accounted for by indirect and direct effects for each value (Centre Left and Centre Right party families) 163
Table 5.4	1990 Mediation Model highlighting direct and indirect effects 166
Table 5.5	Mediation Model of Catholic and Protestant country type subsamples 169

		<i>Page</i>
Table 6.1	Value and distribution of r^2 by year and country	190
Table 6.2	Mean average of r^2 by party family type	191
Table 6.3	Party polarisation and effective number of parties for each country	193
Table 6.4	GLM models of r^2 values	217

List of Figures

	<i>Page</i>
Figure A	Simplified overview of research design 17
Figure 1.1	Configuration of the Universal Values Structure 26
Figure 1.2	Simplified version of the Michigan socio-psychological funnel of causality. 36
Figure 3.1	Highlighting chapter focus on values measurement 77
Figure 3.2	List of five principles for measuring latent values 77
Figure 3.3	Final CFA model specification 91
Figure 3.4	Traditionalism factor scores 2008 101
Figure 3.5	Traditionalism factor scores 1990 101
Figure 3.6	Authoritarianism factor scores 2008 102
Figure 3.7	Authoritarianism factor scores 1990 102
Figure 3.8	Individualism factor scores 2008 102
Figure 3.9	Individualism factor scores 1990 102
Figure 3.10	Conformity factor scores 2008 103
Figure 3.11	Conformity factor scores 1990 103
Figure 4.1	The relationship between values and voting 112
Figure 5.1	The full political identities mediation model 150
Figure 5.2	Diagram of Full Structural Model 157
Figure 5.3	Diagram of Mediation Structures showing confounding effects of left-right for right of Centre Party families 164
Figure 5.4	Diagram of Mediation Structures of voting highlighting key findings from the 1990 models 167
Figure 5.5	Diagram of Mediation Structures of voting on key values dimensions for Centre Left and Centre Right in Catholic and Protestant models 170
Figure 5.6	Diagram of Mediation Structures of voting for Traditional values dimension of Conservative and Christian Democrat party vote in the 2008 Catholic and Protestant country type models 172
Figure 6.1	Map of values strength in Western Europe 193
Figure 6.2	Graphs of polarisation by the effects of 'Core Political Values' on Centre Left and Centre Right voting 195
Figure 6.3	Graphs of polarisation by the effects of 'Core Political Values' on Conservative and Christian Democrat party voting 197
Figure 6.4	Graphs of polarisation by the effects of Traditionalism on party voting 199
Figure 6.5	Graphs of polarisation by the effects of 'Core Political Values' on Nationalist and Communist Voting 200
Figure 6.6	Graphs of polarisation by the effects of Authoritarianism on party voting 202
Figure 6.7	Graphs of polarisation by the effects of Conformity on Christian Democrat and Conservative voting 203

	<i>Page</i>	
Figure 6.8	Graphs of number of parties by the effects of values on Communist voting	204
Figure 6.9	Individualism indirect effects	207
Figure 6.10	Individualism direct effects	209
Figure 6.11	Egalitarianism indirect effects	211
Figure 6.12	Egalitarianism direct effects	213
Figure 6.13	Traditionalism direct effects	214
Figure 6.14	Authoritarianism direct effects	215
Figure 6.15	Conformity direct effects	216

Abstract

Institution: University of Manchester
Name: Thomas Ivan Powell Loughran
Degree Title: PhD in Social Change
Thesis Title: “A values based electorate?” How do voters in West European Democracies convert their political values into vote choice preferences?
Date: 9 May 2016

It has long been argued that underlying values should hold a central role in political analysis. This would seem particularly relevant in an era of de-alignment and catch-all parties in which political actors often make direct values orientated appeals to the electorate. With the expansion in appropriate data and measures available to empirical researchers, the last two decades have seen a substantial increase in the number of studies directly addressing the values-voting relationship. Values based explanations of vote choice have contributed to a more nuanced understanding of the processes underlying voter preferences and the structure of public opinion within democratic electorates. This existing empirical literature has generally focused on analysing the role of values on voting in single electoral contexts. While this approach has generated many useful findings that establish the role of values in differentiating political choice, it has only partially explored the contextual mechanisms through which values influence vote choice. This is necessary in order to understand under what political conditions values are likely to become more relevant to vote choice decisions.

This thesis is an attempt to address three aspects of this gap in the cross-national research literature on values and voting using analyses of data from the 1990 and 2008 waves of the European Values Survey. Firstly it provides a cross-national analysis of core political values that enables a comparison of the role of values in structuring electoral competition across 15 West European countries. Secondly, it estimates the role that left-right political identity has in mediating the influence of values on vote choice using a structural path model. This provides a cross-national test of this mechanism and therefore assesses variation in the values-voting relationship across different national contexts. Thirdly, the thesis provides a systematic empirical analysis of the influence of political context on the values-voting relationship by testing the effect that macro level system factors, such as polarisation and the number of parties, have on the influence of values. The headline findings of the thesis are that political values are dynamic constructs that can demonstrate subtle variations in the preferences of voters across different electoral contexts. Political values have a multi-dimensional influence on electoral choice; with variation in voter preferences being highlighted by both value differentiation (having opposite preferences for the same value dimension) and emphasis (having a preference for different values). Left-right identity can act as both a mediator and a confounder of political values influence on vote choice. Political context is primarily relevant to the influence of values on voting through the content of supply side party competition as opposed to the structure of that competition. Overall, the study argues the findings suggest that supply side political context plays a crucial role in defining the parameters and strength of the values-voting relationship in each specific electoral arena.

Declaration

That no portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

Copyright Statement

- i. The author of this thesis (including any appendices and/or schedules to this thesis) owns certain copyright or related rights in it (the "Copyright") and s/he has given The University of Manchester certain rights to use such Copyright, including for administrative purposes.
- ii. Copies of this thesis, either in full or in extracts and whether in hard or electronic copy, may be made **only** in accordance with the Copyright, Designs and Patents Act 1988 (as amended) and regulations issued under it or, where appropriate, in accordance with licensing agreements which the University has from time to time. This page must form part of any such copies made.
- iii. The ownership of certain Copyright, patents, designs, trade marks and other intellectual property (the "Intellectual Property") and any reproductions of copyright works in the thesis, for example graphs and tables ("Reproductions"), which may be described in this thesis, may not be owned by the author and may be owned by third parties. Such Intellectual Property and Reproductions cannot and must not be made available for use without the prior written permission of the owner(s) of the relevant Intellectual Property and/or Reproductions.
- iv. Further information on the conditions under which disclosure, publication and commercialisation of this thesis, the Copyright and any Intellectual Property and/or Reproductions described in it may take place is available in the University IP Policy (see <http://documents.manchester.ac.uk/DocuInfo.aspx?DocID=487>), in any relevant Thesis restriction declarations deposited in the University Library, The University Library's regulations (see <http://www.manchester.ac.uk/library/aboutus/regulations>) and in The University's policy on Presentation of Theses.

Acknowledgements

First and foremost I would like to sincerely thank my primary supervisor Professor Ed Fieldhouse for the excellent help, advice, support and encouragement he has offered throughout my PhD project. The way in which he has consistently supported me to address the research challenges arising from this project has helped to demystify the social science research process and given me an excellent education in the rigours of academic research. I would also like to thank my secondary supervisor Dr David Cutts who provided me with excellent encouragement and support particularly in the early stages of the PhD process and who has consistently provided me with excellent additional feedback and ideas.

I would like to thank the academic and support staff and students at the Institute for Social Change (and latterly the Cathie Marsh Institute for Social Research) at the University of Manchester for providing an engaging and supportive academic environment in which to carry out this research. It has made my time at the University a very pleasant and deeply rewarding one. I particularly thank Dr Nick Shryane, Professor Rachel Gibson, Professor Jane Green and Dr Laurence Lesard-Phillips for their additional advice on aspects of the thesis and for excellent general support throughout my time at the University. I thank all the PhD colleagues I have had in the Institute for Social Change for the friendship, support, advice, encouragement and collegiate spirit that has been generated throughout. I would like to particularly mention Annie Austin, Lindsay Richards, Mariken Schipper, Devi Femina, Lee Bentley, Silvia Galandini, Eduardo Olivares-Conchares and Adrian Leguina-Ruzzi.

I thank all those who have offered me advice and feedback on aspects of this thesis from outside of the University of Manchester. I am very grateful to Professor Susan Banducci (Exeter), Professor Dan Stevens (Exeter), Professor Charles Pattie (Sheffield) and Professor Jamie Carson (Georgia) all of whom provided me with detailed written feedback.

Most of all I would like to thank my friends and family for the support, encouragement and patience they have shown throughout what can be a very self-absorbing and time-consuming process. I would not have been able to have made it this far without the constant love and support of Frank, Sharon and Elizabeth. Special mention to Frank for the enormous effort and detail he put into proof reading the thesis and for general excellent fatherly advice throughout the process. I also thank Ali very much for constant emotional support, patience and much needed good times!

Finally I would like to thank my examiners for taking the time to read this thesis and re-affirm that any errors are entirely my own.

Dedication

This thesis is dedicated to the memory of my mother Gillian Powell (1951-1993) who was my first and best teacher.

Introduction

It has long been argued that values should hold a central role in political analysis (Easton, 1953). This is increasingly relevant in an era of de-alignment, catch-all parties and critical citizens, where political actors may be increasingly incentivised to make direct values orientated appeals to the electorate (Norris, 1999; Dalton, 2006). Despite key studies that have established and summarised their importance to core personal and political identities (Rokeach, 1973; Hitlin, 2003) there remain intriguing substantive gaps in the understanding of how values are reflected in political choice. This is partly because within the electoral research field values have often been in competition with ideology as the underlying explanatory construct for the structure of public opinion, with ideology traditionally being considered the more relevant construct for explaining electoral choice (Converse, 1964; Conover and Feldman, 1981). The influence of values on individual vote choice preferences was originally theorised within broader socio-psychological or rational models of voting, such as spatial voting or the Michigan causality model (Downs, 1957; Campbell *et al.*, 1960). As Knutsen (1995a, p.461) observes, while there has been a steady stream of empirical research on the relationship between values and voting it often lacks a systematic research agenda comparable with discussions of classic known influences on vote choice such as class or economic voting (Manza, Hout and Brooks, 1995; Lewis-Beck and Stegmaier 2000). Instead the vibrant aspect of the academic debate related to values has tended to focus more on the measurement of political values, how stable they are and how they relate to other constructs such as attitudes and ideology, as well as their impact on voting (Converse, 1964; Evans, Heath and Lalljee, 1996; Maio and Olsen, 1998; Feldman and Johnson, 2014). There has been ongoing debate in these areas since the release of Converse's seminal 1964 article 'The Nature and Origin of Belief Systems in Mass Publics' failed to find empirical support for the theory that individuals have organised and coherent political attitudes. Empirical work in this field has also consistently debated the importance that political values have in structuring vote choice and the dynamics of the causal relationship between values and party choice (Feldman 1988, Goren 2005). This thesis aims to build on this research tradition by taking a cross-national comparative approach to analysing the relationship between political values and voting in order to assess the influence of political context on the values-voting relationship.

In his pivotal work identifying the rise of postmaterialism, Inglehart (1971) was among the first empirical political scientists to seriously address the definition, measurement and relevance of values on a cross-national, comparative level. This has subsequently been used to address key empirical questions of social change and political behaviour in Western Democracies as well as firmly establishing the

importance of socialisation processes in driving political cultural change (Inglehart, 1997; Norris and Inglehart, 2004; Inglehart and Welzel, 2005). In this regard, the postmaterialism literature is particularly effective in highlighting the almost unique utility of values in allowing social scientists to explore the micro-macro interaction between the underlying motivations of the individuals and socio-political structures (Hitlin and Piliavin, 2004). With the expansion in appropriate data and measures available to empirical researchers, the last two decades have seen a substantial increase in the number of studies that have been able to directly address the values-voting relationship. This literature has been quite fragmented, with a tendency for different research traditions to talk past each other: a general issue with the empirical values literature as identified in a key review of the field by Hitlin and Piliavin (2004). One of the most important recent developments has been the emergence of cross-national studies that look at the role of values in explaining the structures of political division across different political cultures (Pioro, Schwartz and Davidov 2011; Aspelund, Lindeman and Verkasalo, 2013; Schwartz *et al.*, 2014). However, this research has almost exclusively utilised the Schwartz values model and therefore focuses primarily on individual values as opposed to political values. This thesis aims to contribute to two areas within this emerging comparative literature. Firstly it intends to assess the role of left-right identity in converting political values into vote preferences in Western Europe across a full range of party families, thereby aiming to combine insights from two separate research traditions on values. Secondly, it intends to consider the role political context (at the national level) has in influencing the relationship between values and voting.

The overall model that is being tested in this thesis assumes that voters can meaningfully connect their political values to their party choice through the prism of their perceived left-right identity (Caprara *et al.*, 2007; Aspelund, Lindeman and Verkasalo, 2013). Specifically, following on from other findings in this area, it tests the influence of subjective political identity as a mediator of the values-voting relationship (Schwartz, Caprara and Vecchione, 2010; Vecchione *et al.*, 2013). Political and social identities, particularly left-right, remain key heuristics in vote choice decisions, not least because this is the lens through which popular political discussion takes place in the media and remains the way in which political elites position themselves (Kriesi *et al.*, 2008; Pioro, Schwartz and Davidov, 2011). The heuristic mechanism through which values ultimately influence vote choice is unlikely to be direct. Due to data limitations prior researchers have often been forced to model the relationship between values and voting as direct while acknowledging that the influence of values on voting is likely to be mediated (Van Deth and Scarbrough, 1995b). Most studies assume that there is an intermediate mechanism linking values to political action and this is generally recognised as a theoretically sound approach to analysing values and voting (Maio and Olsen 1998; Caprara *et al.*, 2007; Goren, 2005;

Goren, Federico and Kittilson, 2009). Left-right represents a political construct that has remained universal and enduring within most Western European Democracies both as a concept for analysing politics and as a way for individuals to express a political identity (Kitschelt and Hellemans, 1990; Knutsen, 1998). It has been shown that the meaning of the left-right cleavage varies across time-points and between European countries (Inglehart, 1976; Knutsen, 1995b; Schmitt and Van der Eijk, 2010). This is a positive advantage for a study such as this that is looking at how the values-voting mechanism may vary in different contexts as it acknowledges that the underlying makeup of left-right is subject to variation. It is consistent with the theory that the influence of values is contextually dependent. In addition, the ubiquity of left-right as a heuristic in political culture and its resilience in absorbing new political issues and divisions make it the most realistic identity based mediator to compare in cross-national analysis. It allows the thesis to explore its first aim - to measure the extent to which the values-voting mechanism is liable to vary between countries.

The second contribution that this thesis intends to make to the comparative analysis of the values-voting relationship is in assessing the role of political context. In particular the thesis will test if the party choices available to voters influence the relationship between values and voting. This provides a connection with recent work in electoral studies focusing on how the nature of the choices available to specific electorates influences the vote choice preferences of voters (Dalton and Anderson, 2010; Evans and de Graaf, 2013). Values are formed in specific social contexts and it has been well established that this socialisation process is vital in defining which values individuals prioritise when making decisions about behaviours and actions (Maslow, 1954; Inglehart, 1971; Rokeach, 1973). By applying logic based on findings in the psychology literature related to motivated action it is reasonable to assume that contextual priming will play a key role in defining when and where values will become relevant to political decisions (Maio and Olsen, 1998; Verplanken and Holland, 2002). Values are only likely to become relevant in vote choice decisions if voters can easily associate specific values to specific parties or to the relevance of salient political issues. Without these necessary primes the influence of values on political decision-making is liable to remain dormant even if those values are a core part of an individual's identity (Verplanken and Holland, 2002). In the electoral arena these primes are most likely to originate from the dynamics of the party system itself. While different types of party are likely to try to appeal to different values within the electorate, it is the dynamics of the overall electoral context they operate within which is likely to define whether those values will prove more or less relevant to voters. This contextual priming influence relates to the role and incentives that parties can have in appealing to voters values and rendering them relevant to their vote choice (Goren, Federico and Kittilson, 2009; Leimgruber, 2011). Therefore, the thesis will take an additional analytical step and introduce macro party system measures into the values-

voting model in order to provide a comparative test of the influence of political context.

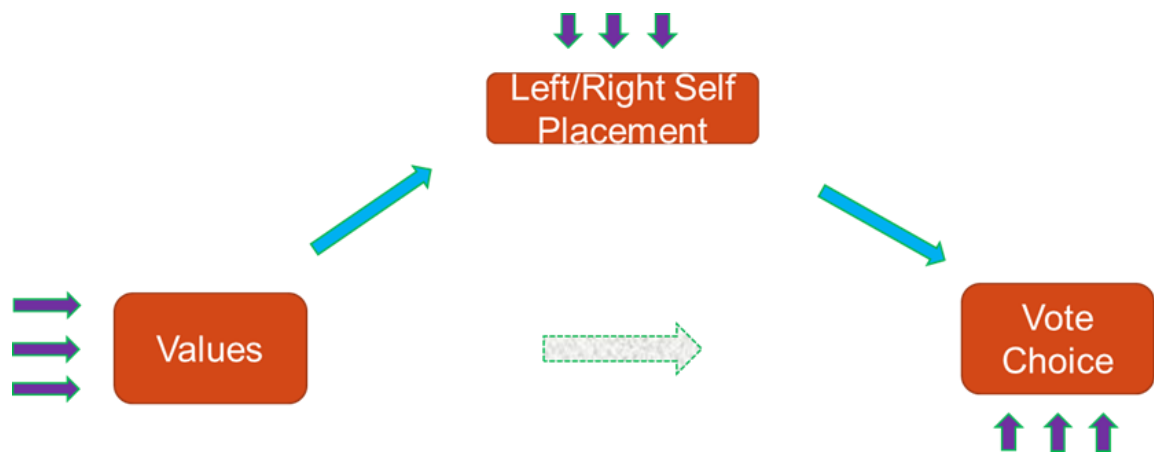


Figure A Simplified overview of research design

This analysis attempts to address these two gaps in the cross-national literature, highlighted above, through comparative quantitative analysis. This will draw on secondary data from the European Values Survey (EVS) focusing on fifteen Western European Countries using the 2008 and 1990 survey waves. The empirical chapters are based on developing a latent structural model of political values that has identified key political values using the EVS: Traditionalism, Individualism, Authoritarianism, Conformity and Egalitarianism (*Chapter 3*). The model applies to all fifteen countries in the analysis at both the national level and the pooled level. This measurement model is then used to test the political identities theory of the values-voting relationship (outlined in *Figure A*). It will accomplish this by, firstly, establishing that the measurement model can independently predict voting preferences directly at the pooled level across all party family types in Western Europe (*Chapter 4*). The analysis will then test the validity of the full political identities model by introducing left-right self-placement as a mediator of the values-voting relationship in a full Structural Equation Model (*Chapter 5*). The final stage of the analysis introduces measures of party system context into the overall model, such as number of parties and polarisation, in order to measure the effect of political context on the values-voting relationship at the cross-national level (*Chapter 6*).

The thesis is organised in the following way:

Chapter 1 is the literature review that will situate this study within the existing research into the role of values on voting and connect it with the relevant electoral studies literature on the impact of political context. *Chapter 2* will be a systematic methods review of previous empirical political research using values and will try to draw out consistencies and patterns within the fragmented empirical literature. The

aim of this is to develop a clear set of definitions and principles to guide the empirical chapters of the analysis. *Chapters 3-6* are the main empirical chapters outlined in the paragraph above that represent the core research and contribution of the thesis. *Chapter 7* will be a concluding discussion addressing the relevance of the contextual approach to the values-voting relationship which builds on the findings in the empirical chapters.

The thesis finds that political values can demonstrate subtle variations in the preferences of voters across different electoral contexts. Political values have a multi-dimensional influence on electoral choice; with variation in voter preferences being highlighted by both value differentiation (having opposite preferences for the same value dimension) and emphasis (having a preference for different values). Left-right identity can act as both a mediator and a confounder of political values influence on vote choice. Political context is primarily relevant to the influence of values on voting through the content of supply side party competition as opposed to the structure of that competition. Overall, the study argues the findings suggest that supply side political context plays a crucial role in defining the parameters and strength of the values-voting relationship in each specific electoral arena.

Chapter 1 The Role of Values

Introduction

This study has two central aims. The first is to model a potential mechanism through which voters political values are converted into their vote choice preferences. The second is to analyse how that relationship varies across different political contexts and is influenced by party system effects. It will be argued that the relationship between values and voting is influenced by voters' subjective sense of their political identity. It is subsequently argued that this mediated relationship is in itself influenced by the electoral context with which voters are faced as reflected in the party system. This literature review will address research that has considered the influence of individual values on structuring political divisions and political behaviour. The review will also provide an overview of the findings from previous empirical research related to individual values and political values. It aims to draw out unifying strands from the somewhat fragmented literature on the influence of values on voting. In doing so, the review will highlight the key contributions that this thesis intends to make. The overall theme of the literature review is highlighting the utility of applying a cross-national comparative approach to studying the values-voting relationship.

The literature review is divided into four sections. Section 1 provides a definition of values and an overview of the key political research strands that utilise empirical research into values. In doing so it highlights some of the core debates related to values and the somewhat fragmented nature of the research agenda. Section 2 focuses on the role that values have in research on the structure of public opinion and how this is relevant to debates on electoral choice. Section 3 specifically addresses the relationship between values and voting. It considers work that explores the mechanisms through which voters connect their values to their voting preferences and introduces the political identities model. This model focuses on the influence of subjective left-right as a heuristic mediator for converting voters' values into political preferences. The review concentrates on previous findings that have used this form of mediation model and outlines how this study intends to build on them in a cross-national analysis. Section 4 addresses the second gap that the thesis aims to address: the influence of political context on the values-voting relationship. It will review work that has focused on the role of political context and party system factors in shaping voting behaviour. It will outline the way in which the values-voting relationship may be influenced by these contextual factors; an area which has not received much previous attention in cross-national research.

Section 1 – Definitions and Overview of Values Literature

Defining values

There is a surprising degree of consensus regarding the definition of values given the disparate and multi-disciplinary nature of the research field. A solid starting definition would belong to Schwartz (1994, p.20) who has defined values as representing 'abstract beliefs about desirable end states or behaviours that transcend specific situations, guide evaluation and behaviour and can be rank ordered in terms of relative importance'. Aspects of this definition are open to debate; particularly the level of abstraction that values represent and the extent to which they can be meaningfully rank ordered (Cochrane, Billig and Hogg, 1979; Datler, Jagodzinski, and Schmidt, 2013). However, in this sense values provide an organising guide for individual decision making that play a key role in structuring attitudes and behaviour. It is this perspective that defines the basic universal outline for values as a unique construct across most social science subfields (Hitlin and Piliavin, 2004). Within the values literature in political research there is a general consensus for 'values as representing individual views of what is desirable or 'good' and what is not' (Leimgruber, 2011, p.108). The addition of 'what is not' is a relevant distinction when addressing the role of values on political choice because it takes into account individuals having negative associations towards values as well as positive, which demonstrates their obvious significance for studying the dynamics of political competition. The nature of values, particularly political values, and the boundaries regarding what is categorised as a value are fairly strongly contested areas as will be demonstrated below and in Chapter 2. However, the basic definition of values as representing 'abstract individual conceptions of the desirable', or, 'distinct and often conflicting moral principles' (Heath, Evans and Martin, 1994, p.116) appears largely uncontroversial.

Despite this clear definition one of the central challenges faced by values researchers, particularly those investigating political phenomena, has been establishing the extent to which values represent distinctive constructs both theoretically and empirically. Most researchers follow on from Converse's (1964, p.211) definition of values as 'a sort of glue to bind together many more specific attitudes and beliefs' referring to a specific form of attitude constraint. Converse's theory of belief systems identified two sources of generalised constraint on opinions and attitudes: sociological constraints and psychological constraints. This underpins the crucial distinction between values and ideologies. For sociological constraint, 'political attitudes and beliefs are organised into coherent structures by political elites for consumption by the public' (Feldman,

1988, pp.416-417). This perspective has been important in analysing the role of ideology. But, it is Converse's secondary concept of psychological constraint that underpins much of the work on political values. It implies that individual attitudes towards political objects can be grounded in fundamental moral principles of personal identity rather than defined by the framing of political elites (Rokeach, 1973; Feldman and Johnson, 2014). In studies identifying the structure of public opinion this latter approach has generally proven more fruitful than Converse's initial tests of ideological constraint within the sociological model (Conover and Feldman, 1981; Feldman, 1988; Goren, 2005). This is important because the psychological model of constraint implies that there is a two-way relationship in terms of the core values of voters and the behaviour of parties which assigns both significant agency in shaping the political values of the other, whereas the sociological model implies that parties have a dominant role in defining those parameters (Goren, Federico and Kittilson, 2009). This identifies values as a distinct construct from ideology in two key respects. Firstly, values are moral constructs and principles that transcend the political arena (Barnea and Schwartz, 1998). Secondly, they are primarily the property of unique individual level belief systems rather than that of elite political actors such as parties (Feldman, 2003).

While accepting the concept of psychological constraint Rokeach's (1973) groundbreaking approach to values contrasted with Converse's approach in arguing that there were two types of values that had separate functions in constraining attitudes and behaviours. In addition to the Converse perspective of values representing an underlying principle guiding attitudes and belief, Rokeach argued they could also function as a direct heuristic mechanism for decision-making. This started one of the most important strains of values research related to where values sit in the causal chain of individual action (Maio and Olsen, 1998; Peffley, Knigge and Hurwitz, 2001; Verplanken and Holland, 2002). Rokeach distinguished between instrumental values and terminal values. Instrumental values are those that people use as heuristics as a means to guide every day decisions and actions. These are related to modes of behaviour and are generally regarded as directly connected to an immediate social context and conceived as politically neutral constructs such as 'Cheerfulness', 'Self-control' and 'Courage' (Braithwaite, 1994, p. 68). Terminal values were defined as more abstract conceptions of outcomes representing an individual's goals of desirable end states both for themselves and others such as 'Freedom', 'Family Security' and 'A World at Peace' and have been shown to apply across a number of national political contexts beyond Rokeach's original focus on the US (Wilson, 2004; Dirilen-Gümüş and Sümer, 2013). As such terminal values are not politically neutral or dependent on the immediate behavioural environment. Terminal values are contested social and political territory because generally individuals cannot achieve or express these

desirable end states through their own actions¹. They require others in their network or wider society to act in accordance with their values in order to avoid cognitive dissonance (Rokeach, 1973). Unsurprisingly, this terminal definition of values has proven to have much more influence in the study of political values than the instrumental definition, which has come under criticism for occasionally conflating values and personality traits (Braithwaite, Makkai and Pittelkow, 1996; Datler, Jagodzinski and Schmidt, 2013). However, this identification of the duality of values gives them a clear and important conceptual distinction.

The concept of terminal values greatly improves the distinctiveness of the construct for political research. It clarifies Converse's (1964) purposefully vague description of values as a glue that binds together other aspects of individual political attitudes. Rather than simply representing an underlying aggregation of beliefs and attitudes terminal values represent, in the words of Tetlock (1986, p.820), 'conceptions of the good'. More recently Schwartz (1992) has added further nuance by applying a definition of values rooted in cognitive psychology. This provides further theoretical clarity for the role of values in the causal chain of decision-making and attitude formation. According to Schwartz (1992, p.3) values represent: 'cognitive representations of desirable, abstract, trans-situational goals that serve as guiding principles in people's life'. Once values are identified and defined in more abstract terms as competing 'conceptions of the good', their conceptual distinctiveness becomes clearer. Likewise, using this terminal definition of values as competing conceptions of the good makes the argument for values having an important role in political analysis relevant.

This definition is clearly relevant to electoral research. The substantive relevance of values to electoral studies is established with reference to classic definitions of politics and of elections. Early political scientists perceived electoral politics as the key mechanism for peaceably dividing up resources among competing societal groups with different interests and visions of society (Schattschneider, 1948; Easton, 1953; Lipset and Rokkan, 1967). Elections, and political parties, were identified as an essential and efficient way of aggregating these competing interests and visions and of ensuring legitimate representation. This is an implicit acknowledgement of Rokeach's (1973) subsequent claim that individuals and groups have competing terminal value preferences and one of the key roles of political party competition is to represent these different positions. No claim is being made here that values trump interests, leadership and economic evaluations or issue voting in their relevance to vote choice; merely that values provide an important underlying elements in the socio-

¹ There are exceptions in the Rokeach's list of Terminal values where it is conceivable that individuals may be able to achieve the desirable end state alone: such as 'Wisdom' or 'Self-Respect'. But in general, Terminal values are outward not inwardly facing and require some form of action or validation from others in order to be achieved.

psychological structure of decision-making that helps define the potential relevance of those interests or issues. This position is best summed up in a quote from Easton (1953, p.31) that 'politics is the authoritative allocation of values'. The idea of values structuring political division and providing the context of electoral competition has long been critical to political research. Engrained in this approach is the principle that it is the purpose of political parties to express competing visions of society (Schnattschneider, 1948). In considering electoral politics as the battleground for these competing conceptions of the good the Easton definition highlights the significant role that value change can have in transforming political culture (Inglehart, 2004; Kriesi *et al.*, 2008).

This study will therefore hold to the following three defining principles of political values and how they relate to electoral research:

1. Values represent competing conceptions of the good. (Rokeach, 1973; Tetlock, 1986; Schwartz, 1992).
2. 'Politics is the authoritative allocation of values' (Easton, 1953).
3. It therefore follows that values hold a central role in the analysis of electoral outcomes, from both supply and demand side perspectives.

The fragmentation of values research

Values research is a fragmented field as may be expected of a latent concept that is on the boundary between a sociological and psychological construct (Inglehart, 1971; Maio and Olsen, 1998; Hitlin and Piliavin, 2004). Identifying 'values research' as a distinct field in itself is probably overstating its coherence as a distinctive research area as it implies a unified theoretical debate linked to an evolving systematic empirical research agenda, which is not reflective of how values research has developed. Instead values perspectives tend to hold a central role in a number of different research traditions. The history of values research has been one of fragmented pluralism as opposed to competing theoretical approaches. Unlike the field of electoral studies, where there are an identifiable set of competing theoretical perspectives that have been empirically tested in reference to each other, the values research literature contains a range of perspectives that often appear to be talking past each other (Inglehart, 1971; Feldman, 1988; Schwartz, 1992; Van Deth and Scarbrough, 1995a). Hitlin and Piliavin (2004, pp.359-360) provide a comprehensive review of the history of values research in social science, commenting that 'today when one reads about values across the disciplines of sociology, psychology, philosophy and political science the balkanized nature of the research is striking'. They argue that while values may have long been acknowledged as a key variable in

social science the tendency has been for separate sub-fields, both between and within disciplines, to develop their own perspectives and research agendas on the role of values that do not connect with wider social theory or represent a consistent set of coherent insights within a well-established research agenda. As a result, there is little consensus regarding the measurement and application of values in political research or structured debate around competing conceptions of values and how they relate to social and political action (Feldman, 2003; Hitlin and Piliavin, 2004). Each strand of values research has its own conceptualisation of the role of values, coupled with its own empirical measures, which are utilised to address a wide range of disparate research problems.

This fragmented research landscape has two distinct advantages for researchers attempting to take a values approach to political analysis. The first is that the causal position of values remains very much 'up for grabs' empirically. Far from being strictly defined and measured there is increasing diversification and creativity in the way in which they are being applied, particularly in political research. This can range from treating values as heuristic devices for individual decision making (Marietta and Barker, 2007), to the correlation between individual values and the perceived values of politicians (Vecchione, Gonzalez Castro and Caprara, 2011), to the role that values have in defining long-term historic divisions in regional political cultures (Barker and Carman, 2000). Values are treated as dependent variables, as key predictor variables and as important control variables for the study of a wide range of political phenomena. This diversity affords researchers the flexibility to develop their own approaches and measures of values that map onto specific interests and research aims. The second advantage is the sheer range of alternative multi-disciplinary approaches to values this pluralism generates (Inglehart, 1971; Braithwaite, 1982; Schwartz, 1994; Van Deth and Scarbrough, 1995a; Evans, Heath and Lalljee, 1996; Feldman, 2003; Flanagan and Lee, 2003). The influential studies highlighted represent a range of distinct empirical approaches to measuring values that can be synthesised from across different subfields within political analysis.

It is possible to identify three broad strands within the fragmented field of values research that are directly relevant to the study of political behaviour.

Individual values

The individual values perspective that has been initiated and dominated by Schwartz, takes a holistic approach to the study of values. It has the aim of demonstrating the universal cross-cultural consistency in individual human values (Schwartz, 1992, 1994). As the primary example of a distinct research agenda on values, the Schwartz literature represents an attempt to delineate the entire structure of individual human

values and lays claim to studying the universal underlying motivations of human social action and attitudes (Schwartz, 1992). The Schwartz literature also highlights the distinction between individual and political values. By definition the Schwartz approach focuses on 'individual values' which are categorised as universal as opposed to 'political values' which are dependent on the political and social context of political division (Barnea and Schwartz, 1998). This avoids the conflation of the underlying construct of values with the contemporary issue agenda and is consistent with Schwartz's definition of values as universal underlying abstract constructs that are connected with fundamental human needs. The specific empirical aim of the Schwartz values is to create a robust values typology that applies across time and cultural contexts and can be used to explain the underlying motivations of all social and political phenomena (Schwartz, 1992).

The theoretical underpinning of the Schwartz values is rooted in Maslow's hierarchy of needs (Maslow, 1954). It is claimed that human value priorities are reflective of the specific needs an individual has and are likely to be an enduring reflection of the particular needs of an individual during the critical socialisation period (Schwartz, 1992). These values priorities are reflected in the circular structure of individual values outlined in *Figure 1.1*. Schwartz identifies 10 specific individual values dimensions that are then constrained by 4 higher order values priorities. Individuals are considered to order their values in terms of these higher order priorities according to the circular structure. Individuals who have the highest preference for Conservation values will have the lowest preference for Openness to Change values, for example. However, it is argued that this is not a conscious process. Schwartz (1992) argues that individuals prioritise values but do not consciously order their values – this is reflected in the instructions for operationalising the Schwartz Values Portrait Questionnaire that captures the Schwartz values by asking respondents to assess particular behaviour or attitudes in relation to their own (Schwartz, 2003). To reach a score for each respondent on each dimension these responses are then indexed on the relevant values dimension. The overall mean of responses across all the values questions is then subtracted from each index score to control for response bias and to capture the relative importance each value has for each individual. The aim of research using the Schwartz values is usually to demonstrate their universal construct validity and predictive power in cross-cultural analysis (Davidov *et al.*, 2011; Cieciuch *et al.*, 2014, Schwartz *et al.*, 2014). This work acknowledges the substantive assumption in the Schwartz literature that the value structure itself remains constant cross-nationally. Variation in the relevance of particular values may exist but the structure is a constant (Schwartz, 1994). There may be more hedonists in one place than another, and hedonism may be more relevant in predicting some outcomes than it is to others, but the meaning of the Schwartz value of Hedonism itself would be considered constant and extant in all countries. This diverges from a political values

approach, which would not normally be able to assume the same degree of cross-national construct consistency.

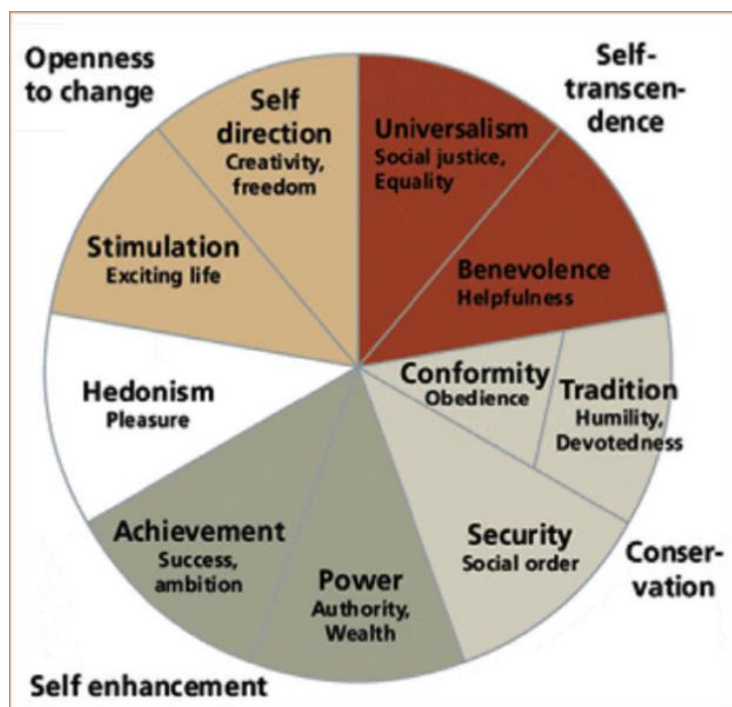


Figure 1.1 Configuration of the Universal Values Structure (Schwartz, 1992).

Many studies in this area have made important contributions to understanding the role of values in structuring vote choice (Barnea, 2003). As will be discussed in detail in Section 3 they have provided particularly important insights into understanding alternative mediating influences of the values-voting relationship (Barnea and Schwartz, 1998; Caprara *et al.*, 2007 Vecchione, Gonzalez-Castro and Caprara, 2011). Initial consideration would therefore suggest that the Schwartz values represent an excellent basis for comparative study. However, as Hug and Kriesi (2010) have observed, the Schwartz values have been deliberately constructed to be contextually detached from known determinants of social actions and socio-political context. Researchers have therefore found that it is not always easy to establish their substantive relevance in political analysis as they generally exhibit a weak direct or non-existent relationship with political preferences (Leimgruber, 2011). The key aspect of political values that is of interest to this study is that their importance depends on the context. The values individual members of the electorate have are formed in the social context of their upbringing and primed by the political context in which they vote. The Schwartz values assume an equivalence that is hard to apply to a study that focuses on variation in the political values between countries. The insights from the Schwartz value literature are clearly highly relevant both substantively and methodologically, particularly as related to cross-national analysis and mediation influences. However, in order to fully explore the influence of political

context it is necessary to primarily focus empirical analysis on the role of core political values.

Core political values

The core political values approach flows from the original work on belief systems pioneered by Converse (1964) and the work on values pioneered by Rokeach (1973). It represents the most widespread direct approach to studying values in political science. It also exemplifies the pluralism of values research. There is an enormous diversity in the way in which values are conceptualised and measured, and an equally large range of outcomes to which they are applied. Contrary to the Schwartz perspective these approaches tend to assume that value structures are variable constructs that can only be investigated within specific contexts (Marietta and Barker, 2007). Values research in this area is almost exclusively focused on the political nature of values. A distinction is sometimes drawn between political values (Feldman, 1988) and moral dispositions (Haidt, 2012), although these terms are liable to a considerable amount of conflation (Kertzer *et al.*, 2014). The political values typologies that are used in this empirical field are not universal. They are limited in scope and often map directly on to existing long-standing political or social divisions (Barker and Carman, 2000).

By tapping directly into political division, the advantage of this approach is that the values dimensions have clear relevance to wider debates surrounding political behaviours and outcomes (Alvarez and Brehm, 1995, 1997; Goren, 2005; Goren, Federico and Kittilson, 2009). The disadvantage is that this focus is potentially achieved at the cost of comparability. The values measures that are used often lack generalisable qualities when applied to time series analysis or wider political and cultural contexts (Feldman, 2003). Values can also sometimes be under-theorised in these approaches, which can risk measurement conflation with attitudes, issues and ideological measures (*see Chapter 2*). However, this is the most common approach in political science research for operationalising values. It strikes a balance between construct validity and explanatory power. Unlike the Schwartz work, which sees the values model as the key phenomena of analysis (whether treated as the dependent or independent variable), this literature treats values as another tool in the political researcher's armoury. Values are not given a privileged status in this work: instead the more modest claim is made that they can contribute to an understanding of political competition and the structure of public opinion. The core argument is that this demonstrates 'heterogeneity in the meanings that citizens impose on the unidimensional (political) space' (Feldman and Johnson, 2014, p.338). This is what makes the relationship between political values and left-right of core interest. The evolution of this approach will be discussed in more detail in Section 2.

Values as dimensions of social change

The final approach to values represents a wider range of approaches that to some extent subsume the influence of values within broader socio-political theories and trends. This contrasts with the previous two approaches that treat values as an independent socio-psychological construct. This approach to values is particularly common in research exploring the dimensions of political competition and their role in driving social and political change (Inglehart, 1971; Flanagan and Lee, 2003; Kriesi *et al.*, 2008). These approaches emphasise the influence of values dimensions in representing long-term divisions within political culture on both the supply and demand side (SurrIDGE, 2012). They are marked out by their emphasis on the extent to which divisions are institutionalised within political culture (Wildavsky, 1987). This study does not connect as directly with this aspect of values research because it is more concerned with the structural relationship between values and voting rather than the role of values in representing a key aspect of broader political change. However, it is necessary to discuss this approach in detail at this point as it continues to make a major contribution to understanding the role of values in structuring political division and is also linked to discussions of political context.

The most influential work in this area relates to postmaterialism. It has been stated that Inglehart's (1971) theory regarding the increasing significance of the postmaterialist values dimension is 'one of the few examples of successful prediction in political science' (Almond 1990, cited in Abramson and Inglehart, 1995, p.139). Inglehart's focus may be primarily on measures of demand side political culture. However, the fusion of economic theory with socialisation theory implies that the materialist-postmaterialist divide is embedded within the wider political structure (Inglehart, 1971. 1990). In both theory and empirical literature postmaterialism is expanded beyond an individual level construct; it encompasses a wider structural element as Flanagan has argued in an important critique (Inglehart and Flanagan, 1987). Therefore, while it is impossible to dispute that postmaterialism is rooted in values theory, it has wider cultural and structural implications that go beyond standard definitions of individual or political values. It is a 'bigger' concept. There is a structural and supply side aspect to postmaterialism: it has been shown to play a role in defining political structures and the political environment (Inglehart and Welzel, 2005). Pure values theories tend to have a narrower scope. They may acknowledge that values can be influenced by supply side factors but values remain largely restricted to an individual level construct. Postmaterialism arguably has more in common with the concept of left-right in this regard. Although it is often referred to as a theory of values it has wider significance as a general theory of political culture. The broad variations of political values (such as Security, Tradition or Universalism) are subsumed within the materialist-postmaterialist dimension and researchers have

empirically demonstrated how more specifically defined values map onto this dimension (Braithwaite, Makkai and Pittelkow, 1996).

The relationship between postmaterialism and vote choice is complex. Lipset and Rokkan (1967) chart the development of political cleavage competition as mirroring the evolution of key societal divisions and the religious-secular divide which remains embedded within the structure of electoral competition in many established democracies (Brooks, Nieuwbeerta and Manza, 2006; Putnum and Campbell, 2010; Raymond, 2011). While there is a debate regarding the extent the 'frozen' nature of these cleavages may have steadily dissipated since the 1960s, as the 'new politics' of postmaterialism has become more prominent, studies have demonstrated that the party systems of established democracies remain as artefacts of these original divisions (Mair, 1997; Dalton and Wattenberg, 2002; Lachat and Dolezal, 2008). Knutsen (1995c) has demonstrated the impressive robustness of both the party system and the existing cleavage structures in absorbing the value divisions associated with postmaterialism. Comparing competing theories of how old political structures react to new politics across 15 Western European countries Knutsen showed that a theory of absorption is generally applicable. The issues of post-materialism become part of the political competition among mainstream established parties and map onto existing political cleavages. Therefore, in general the new politics of postmaterialism has a relatively marginal direct impact on voting itself – a point acknowledged by Inglehart: 'we would expect the impact of Postmaterialism to be weakest on voting behaviour and strongest on support for social change' (Inglehart, 1990, p.306). Political change linked with rising postmaterialism has more often been identified as one explanation in the rise of 'anti-politics' and New Politics issues rather than transformation in the relationship between values and party political preferences. Empirical findings have consistently demonstrated that postmaterialism is linked to a decrease in party identification, a decline in turnout and the increase in non-conventional forms of political engagement (Inglehart, 1997; Dalton and Anderson, 2010; Blais and Rubenson, 2013).

Another influential approach rooted in social change and often linked to the postmaterialism literature is the work on the authoritarian-libertarian value divide. While one aspect of this literature is directly linked to the core political values approach, cross-national work in this area has often extended the dimensions beyond the values concept by positioning the authoritarian-libertarian dimension as a broader societal division that is one aspect of a multi-dimensional political space (Van Deth and Scarbrough, 1995a; Flanagan and Lee, 2003). As with postmaterialism this implies that it has a meaning and influence somewhat beyond Conover and Feldman's (1981) interpretation of Converse's psychological constraint because it includes strong supply side implications. Authoritarianism and libertarianism are clearly individual

values but the authoritarian-libertarian socio-political division as a dimension of political change has a significance that implies sociological constraint via the conscious positioning of the political elite (Kitschelt and Hellemans, 1990). The political elite have the capacity to define the parameters of the authoritarian-libertarian dimension to some extent (Inglehart and Flanagan, 1987). Flanagan and Lee (2003) argue that because of this the authoritarian-libertarian divide is a more accurate dimension than postmaterialism in measuring political change in developed democracies. They link it to the increase in education levels and argue that the libertarian dimension in particular is responsible for the emergence of a more individualised political culture both among the electorate and within the party system.

Overall this section has highlighted two important core features of values research. Firstly, it has demonstrated that the definition of values is relatively uncontested within social science research. Secondly it has provided an overview of the fragmented literature related to political values. Section 2 will move on to reviewing work that specifically focuses on the role of values in structuring political choices.

Section 2 –The Structure of Political Values

Work regarding the structure of values clearly has an implication on two critical debates regarding the role of values in political analysis. Firstly, it plays a major role in the debate around the level of abstraction values should represent as a distinctive construct. Secondly, and related, this influences the empirical debate regarding how values should be operationalised both regarding their measurement and predictive qualities. Chapter 2 will focus on the measurement issue in detail but it is important to outline how work on the structure of political values influences discussion of the role of values on voting.

The role of constraint

The core focus of much empirical research into political values is on using the values concept to address research questions related to the structure of public opinion. This is clearly consistent with a definition of values as underlying structures of political division and has also been recently linked with high profile work on the emotional drivers of political decision-making (Westen, 2007; Lakoff, 2009; Haidt, 2012). However, many studies related to core political values are contributions to the ongoing vibrant debate around the nature of attitudinal constraint originated with Converse's (1964) theory. It has already been highlighted above how the distinction between sociological constraint and psychological constraint is at the core of defining the distinction between ideology, values and dimensions of the political space (Peffley and Hurwitz, 1985; Feldman, 1988). Further debates regarding the role of values in

attitudinal constraint emerge from the political psychology literature: namely whether values represent a form of hierarchical constraint on attitudes (Nie and Anderson, 1974; Peffley and Hurwitz, 1985). Nie and Anderson (1974) repeated Converse's approach but introduced an over-time element arguing that attitudes were becoming more constrained over-time with increases in the correlation between specific attitudes. In response to this, Peffley and Hurwitz (1985) made a key substantive and methodological contribution to this field by specifically estimating the role of hierarchical constraint. In doing so, they evidenced strong support for Converse's theory of constraint but a challenge to the established methodology. They demonstrated that hierarchical attitudinal constraint cannot be adequately measured horizontally by assessing the strength of correlation between attitudes 'thereby failing to capture the important relationships which span the various levels of abstraction' (Peffley and Hurwitz, 1985, p.874). By prioritising the importance of abstraction this represented a partial move away from both Converse's approach to the structure of public opinion and from Rokeach's (1969, 1973) conceptualisation of values as having a more proximate impact on behaviours.

In providing empirical support for their hierarchical model of constraint Peffley and Hurwitz provided the groundwork underpinning a general consensus in most subsequent work that core political values represent a latent abstract construct. This connected with the emerging literature from the 1960s onwards related to the dimensionality of public opinion, which resulted in an expansion of interest in political values (Lane, 1962; Luttbeg, 1968; Conover and Feldman, 1981; Kinder, 1983; Fleishman, 1988). Arguably, values became of increasing significance in political research as mounting empirical evidence continued to identify the structure of public opinion as multi-dimensional. This undermined aspects of Converse's (1964) theory of ideological constraint but it also put pressure on the more general assumption of a single ideological dimension underlying political opinion. It culminated in Feldman's (1988) seminal work which linked this multi-dimensionality to core political values identifying three in the American public: equality of opportunity, economic individualism and the free enterprise system. This work represented a move towards recognising hierarchical value constraint as being the key component structuring underlying divisions in public opinion rather than ideology. Feldman also clearly established the role of these values dimensions as predictors of party preferences and candidate evaluations. This identified values as playing a role in the causal chain of political decision-making and generated an expansion of studies considering this causal relationship, particularly as they relate to political choice, which will be discussed in more detail below (McCann, 1997; Goren, 2005; Jacoby, 2006; Goren, Federico and Kittilson, 2009).

The above discussion focuses exclusively on studies from the US. In Europe, the evolution of the study of political values is somewhat less clear-cut, although in general it evolved in reference to the same research tradition. While concepts such as left-right have always been key to political analysis of European politics – classic work tended to emphasise the significance of this division in terms of social cleavage structures as much as public opinion (Lipset and Rokkan, 1967). It was the emergence of the postmaterialism thesis (Inglehart, 1971) that ignited widespread debate regarding the role and utility of values in both structuring public opinion and driving political change (Inglehart and Flanagan 1987). This means that there is a slightly different emphasis in cross-national political values research based in Europe – it tends to have more of a focus on measuring value change over-time and on the explanatory power that values have in regards to cross-cultural differences (Van Deth and Scarbrough, 1995b; Knutsen, 1998; Knutsen and Kumlin, 2005). However, there is still interest in the debates regarding dimensionality and constraint.

The work from the UK regarding the authoritarian-libertarian value dimension is a good example of this. A series of studies in the mid-1990s established the viability of a multi-dimensional structure of UK political attitudes: identifying separate scales for measuring socialist, *laissez faire*, libertarian and authoritarian dimensions (Heath, Evans and Martin, 1994; Evans and Heath, 1995; Evans, Heath and Lalljee, 1996). Evans, Heath and Lalljee (1996) outline this approach as one response to the poor performance and increasing theoretical implausibility of uni-dimensional models of political attitude constraint. This is linked to the research literature on core political values, particularly regarding the use of latent measurement methods to capture authoritarian and libertarian values preferences at the individual level (Heath, Evans and Martin, 1994). Crucially, when linking this work to the core political values literature, these studies treat values dimensions as both multi-dimensional and hierarchical in the sense that they recognised the role of values as constraining attitudes at a higher level of abstraction. The values dimensions are treated as latent concepts where the underlying structure and dimensionality can be validated via confirmatory factor analysis (Heath, Evans and Martin, 1994, p.119). This captures the presence of hierarchical constraint in a systematic manner. In addition, while this research was primarily concerned with developing valid measures of the constructs it also validated these constructs by demonstrating their strong performance in predicting vote choice, partisanship and other political behaviour compared to other known measures such as the left-right scale and postmaterialist index (Evans, Heath and Lalljee, 1996, p.102). Interestingly, these measures have subsequently proved effective indicators of value change in the UK. Tilley (2005), discussing the association between the authoritarian-libertarian and postmaterialism identified the role of generational replacement in driving increasing levels of libertarian values in the UK. Surridge (2012), by comparing the fit quality of confirmatory factor models over

time and between socio-demographic groups, has demonstrated small but important changes in the interpretation of these values over-time. Both these studies demonstrate that these measures of values dimensionality can be used to capture political value change in UK society.²

Van Deth and Scarbrough (1995b) lay out an influential conceptual framework for analysing values in a cross-national context which highlights two additional important structural aspects: abstraction and ordering. Abstraction is partially linked to the debate regarding constraint outlined above but it has a secondary element – the role of values in the causal chain of action. There is both an open and implied critique of the Rokeach (1973) approach from a number of values researchers who contend that it perceives values as having a loosely defined functional purpose as opposed to considering their role in a chain of action (Schwartz, 1992; Van Deth and Scarbrough, 1995a; Verplanken and Holland, 2002; Feldman, 2003). This makes central the idea that the relationship between values and behaviours is not automatic – it requires contextual and cognitive primes to render values relevant to decision making (Verplanken and Holland, 2002). It means that the relevant structure of political values is dependent not just on their role as guides for decision making in the Rokeach (1973) sense but also on the extent to which the political context shapes and primes those values (Verplanken and Holland, 2002; Feldman and Johnston, 2014), which makes the discussion around the shape of value structures important.

The structure and dimensionality of values

Even if values are acknowledged as an abstract latent construct, some consideration needs to be given as to whether individuals can meaningfully prioritise values in some form of hierarchical order. This is clearly key to the theory and measurement of postmaterialism as it implies a transformation of values priorities and is consistent with the definition of values as representing competing priorities of the desirable that informs most studies of political values (Abramson and Inglehart, 1987; Marietta and Barker, 2007; Schwartz *et al.*, 2012). Many approaches emphasise the potential of values to come into conflict as regards a given decision; for example, according to Rokeach (1973) an individual may have to decide whether they consider equality or freedom to be of more importance when casting a vote. However, researchers such as Feldman have argued that values may not always be rank ordered and that prioritisation may be less significant than differentiation (Conover and Feldman, 1981; Feldman and Johnston, 2014). In this approach, instead of individuals ranking values in order they are instead likely to accept or reject certain values. The extent to which

² Although it should be noted that both van Deth and Scarborough (1995b) and Flanagan and Lee (2003) highlighted the difficulties in identifying comparable cross-national measures of authoritarianism and libertarianism distinct from postmaterialism.

people meaningfully rank order values therefore has implications both for an understanding of the impact of values as structures of political division and also for the measurement of values. In addition, Barnea and Schwartz (1998) argue that the structure and ordering of political values differs from that of personal values. Schwartz (1992) argues that when people rank order individual values they consistently favour particular clusters of specific values (such as Security and Tradition) based on higher order psychological priorities (such as need for conservation). Political values are not considered to have the same universal structure or consistency and are therefore more meaningful in highlighting differentiation in values between different individuals than the rank order of values each individual has (Barnea and Schwartz, 1998).

Outside of the Universalist approach associated with the Schwartz literature, comparative European research on value structures has focused on the issue of competing explanations of value dimensionality (Inglehart and Klingemann, 1976; Van Deth and Scarbrough, 1995a; Knutsen, 1998). This perspective is best laid out in the Van Deth and Scarbrough (1995a) edited volume on the role of values and value change in West European political culture. It is another study that recognises values as 'non-empirical – that is not directly observable'; i.e. latent constructs (Van Deth and Scarbrough, 1995b, p.22). In the introduction to this volume Van Deth and Scarbrough identify three broad competing political dimensions in West European politics that are predominantly driven by value orientations; postmaterialism-materialism, left-right and secular-religious. In this typology, postmaterialism represents the development of new values priorities that both cross-cut and catalyse the left-right and secular-religious dimensions associated with classic social cleavage theory. Interestingly, Van Deth and Scarbrough argue that if postmaterialism is considered a product of postmodernity then it can be argued that the left-right dimension is a product of industrial modernity and the secular-religious dimension the product of a pre-industrial political culture. These key values dimensions therefore reflect the wide divisions in political culture inherent in different stages of industrial development. Knutsen argues that it is ultimately the values aspect of this divide, rather than the underlying social cleavage itself, that maintains relevance to politics because it implies an enduring significance for values divisions even if the social cleavages that form them weaken. This approach represents a core defence of the role of values as structures of political division that can account for long-term change (Knutsen, 1995a).³ However, it was not possible at that point, to fully operationalise the theorised latent aspects of political values in this cross-national comparative

³ However, this study does partially challenge Van Deth's contention both empirically and theoretically by identifying left-right as having primary significance as a broader political cultural heuristic rather than reflecting an economic materialist value dimension. Discussed in more detail below.

context. It is therefore in this area that the study is aiming to make its first contribution.

This section has introduced the debates related to the structure of values and highlights the first of the core research questions this study intends to address. It has shown that there has been a considerable amount of research carried out on the meaning and structure of latent political values and cross-national research on the structure of personal values. However, there have been few attempts to look at the cross-national structure of latent political values and this represents the first contribution that this study is aiming to make.

Can a common latent political values structure be identified across the European Electorate? (Chapter 3)

Section 3 – The structure of values and voting

The relationship between values and voting

The socio-psychological Michigan model of voting (Campbell *et al.*, 1960) is a good starting point for considering the relationship between values and vote choice. In this classic approach, values are positioned in the middle of the influential funnel of causality between social structures and the assessment of the political environment (see Figure 1.2). As consistent with socialisation theories, values are assumed to be representative of the social norms and attitudes of key social group identities underpinning social cleavages (Lipset and Rokkan, 1967). It is generally acknowledged by most theorists that values are formed through socialisation processes and are therefore considered to be stable constructs at an individual level (Inglehart, 1971; Rokeach, 1973; Schwartz, 1992). According to this approach values represent one aspect of the political manifestation of cleavage politics; along with ideology and party identity (Campbell *et al.*, 1960). This means that most research assumes that the role of values in the causal chain of voting is as a key choice heuristic. This idea of values as a key heuristic mechanism is what has driven interest in studying their relationship with vote choice across a number of different research traditions (Rokeach, 1973; Braithwaite, Makkai and Pittelkow, 1996; Marietta and Barker, 2007). However, if values act as a choice heuristic it is important to consider when and how they become relevant to the political process. The issue of priming is therefore critical.

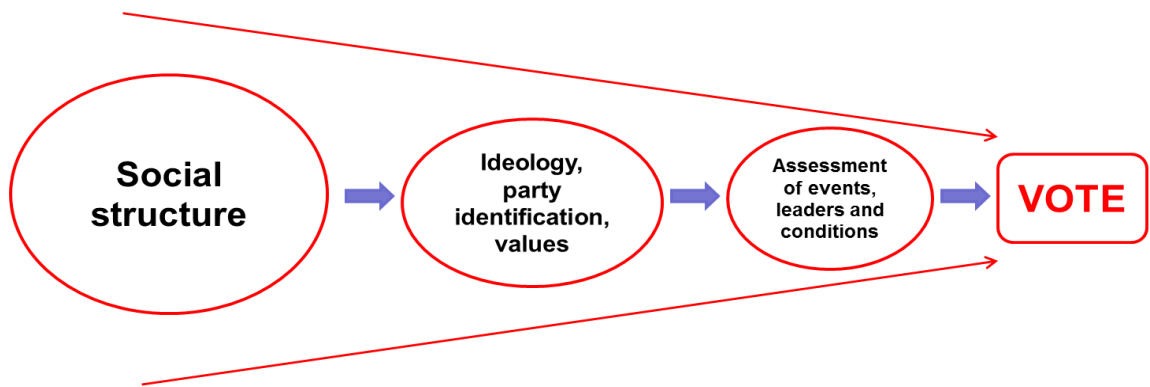


Figure 1.2 – Simplified version of the Michigan socio-psychological funnel of causality. (Based on Campbell *et al.*, 1960).

Using an experimental approach, Verplanken and Holland (2002) demonstrated that there are two conditions that render values relevant to individual decision-making and behaviour. Firstly, values needed to be congruent to the decision-making process: a value must be perceived as relevant to have an influence. Values do not act as universal predictors of choices and behaviour in all contexts. Secondly, values can have a major impact on the choice process but 'only if values were cognitively activated and central to the self' (Verplanken and Holland, 2002, p.445). These findings are essentially consistent with the Michigan model's placement of values in the middle of the causal funnel, which has a number of important implications for the values-voting relationship. Firstly, that the relationship between values and voting is not automatic: it is likely to be influenced by the party choices available, the electoral incentives and the competitive issue agenda. Secondly, that the values of voters can be primed and rendered relevant to their vote choice decisions. This implies that the primary focus of researchers who are specifically interested in the relationship between values and voting should be on the mechanisms through which values influence voting (Leimgruber, 2011). This is consistent with Hitlin and Piliavin (2004, p.383) who argue that values utility in empirical social science is 'a promising arena relating to what has been variously termed "the micro-macro link", "social structure and personality", or the "agency/structure" problem'. Values are theorised as having an indirect effect on voting and it is therefore important to consider both the cognitive mechanisms and the political contexts that render them relevant.

In addition to the importance of priming and the relative proximity of values to vote choice, research also demonstrates that it is important to consider the role of causality. This implies a significant supply side influence on the priming aspects of the values-voting relationship. Some studies have gone further and provided evidence that there may be a two-way causal relationship between political values and voting. Values can play a key role in determining vote choice but vote choice, and more accurately, party allegiance, can play a role in value change. Goren's work (Goren,

2005; Goren, Federico and Kittilson, 2009) highlights how parties can move the political values of their partisan voters through reforming their issue positions and priorities. Goren's initial study (2005) argued that party identification had a stronger role in constraining political values than political values had in structuring party identification preferences. This led to the conclusion that 'party identification shapes a number of abstract beliefs about the good and just society' (Goren, 2005, p.881). A subsequent study used that assumption to explore the parameters through which parties may be able to move the values of their partisan supporters – demonstrating that parties are capable of changing the values of their supporters but only within narrow parameters, suggesting evidence of two-way constraint (Goren, Federico and Kittilson, 2009). This is an important finding regarding the role of party positioning in priming particular values; and it represents a rare example from the core political values literature that empirically tests a potential mediation influence on the relationship between values and party support. This research links to Rokeach's (1973) original theory of value change as occurring when there is an inconsistency between an individual's values and their attitudes or behaviours which results in cognitive dissonance. McCann (1997) explores another aspect of this dynamic in demonstrating that, when committing to a political choice, voters are more likely to subsequently change their values so that they are congruent with that choice. This fits with some of Haidt's (2012) perspectives related to the idea of the rationalising voter: that individuals will want to perceive themselves as having made the correct, logical choice and therefore bring their values into line accordingly. It further highlights the importance of the supply side to the values-voting relationship. This also suggests that, in line with recent findings related to other social influences on vote choice the relationship between values and voting is not automatic but reliant on the positioning and appeals of parties (Evans and De Graf, 2013).

Another strand of research looks specifically at values role as a heuristic in the decision making process. Jacoby (2006) considered the influence of values in hierarchically constraining political attitudes from the perspective of individuals who have different levels of political sophistication, concluding that congruence between values and political choice was dependent on those levels of sophistication. The better someone understood politics, the more likely it was that their values would be consistent and relevant to their political choices. This logical finding casts some doubt on the idea of values as a general heuristic in vote choice decisions. However, Marietta and Barker (2007) demonstrate the opposite when considering Republican primary voting in 2000 – they found that values do act as key heuristics for voters regardless of their level of sophistication. Petersen, Slothuus and Togeby (2010) using an experiment embedded in the Danish election study, argue that the influence of values as a key heuristic on voting is dependent on party framing. If parties provide clear framing of the issues in terms of values then voters will be consistent in

connecting their values with their opinions and preference. If parties are ambiguous in their framing, then values are only relevant to more politically sophisticated voters. This may partially explain the contradictory findings between the Jacoby (2006) and Marietta and Barker (2007) studies; primaries are likely to be a time in which citizens receive particularly clear signals regarding the values priorities of the candidates. Irrespective of this debate, it provides still further evidence of the importance of supply side framing on the values-voting relationship. By highlighting the role of political parties as active agents in priming values the debates around causality and the role of voter sophistication re-emphasises the importance of the role of supply side context in shaping the values-voting relationship.

The final aspect to consider in the relationship between values and voting is what it is that values ultimately represent in this context and why they might matter to debates around electoral choice in a broader context. Feldman (1988, 2003) explicitly states that the core value measures he utilises are not representative of the complete range of potential values, nor do they capture all aspects of that value. They are conceptualised as 'three core beliefs directly relevant to the study of political attitudes that are prominent in the literature' (Feldman, 1988, p.419). The modest claim is made that these political values capture some underlying organising structures which highlight consistency in value positions. This represents a challenge to the idea of the uni-dimensional structure of ideology that 'does not do justice to the ways in which people actually organise their political beliefs' (Feldman and Johnston, 2014, p.353). The role of values in predicting vote choice is therefore a way of exploring a broader and more nuanced political pallet within the electorate and moving beyond the straitjacket of uni-dimensional political divisions. Within the context of the Michigan causality model this argument considers values as a more realistic conception of the link between social structure and more proximate reasons for vote choice than ideology (Campbell *et al.*, 1960). However, others argue that values are consistent with a deeper connection with underlying personality and therefore represent an emotional link with vote choice decisions through rationalising processes. This assumption is represented in research using the Schwartz values where the distinction is made between individual and political values. Vecchione *et al.* (2013) argue that changes in the relationship between core political values and voting could be driven by cognitive dissonance between the opinions of voters and the emotional attachment they have to their preferences. Haidt (2012) goes into considerable depth regarding the extent to which voters are rationalising, and through reviewing a series of psychological studies demonstrates the cognitive effort individuals exert to justify that their values are congruent with their political choices. This study does not directly address this aspect of the values-voting relationship. However, it is important to acknowledge the debate regarding which aspect of Hitlin and Piliavin's (2004) micro-

macro link values are capturing, particularly when moving on to discuss that values-voting mechanism.

Political Identity as a mediator of values-voting

Many potential mediators of the values-voting relationship have been proposed. The relationship between values and many core political attitudes has been established – most of which could make plausible claims as mediators of this relationship. Davidov, Meuleman and Billiet (2008), for example, have established the role of values in predicting attitudes towards immigration and shown how they contribute to variation in attitudes to immigrants between different European countries. Piurko, Schwartz and Davidov (2011) followed this innovative cross-national approach in order to look at the role of individual values in structuring left-right identity in different European countries. The study highlighted key differences in how left-right is perceived in Eastern Europe compared with Western Europe in terms of values dimensions. In Eastern European countries a left position is more likely to be associated with values of tradition and security whereas in Western European countries those values are associated with a right position. The study argues that this is accounted for by the legacy of Communism. In a different research tradition, Alvarez and Brehm (1995, 1997, 2002) have shown the key role core political and moral values have in structuring voters' attitudes to key social issues such as abortion and minority rights. However, there are few examples of studies that have taken the additional step and considered the role of these attitudinal factors in mediating the relationship between political values and voting behaviour and none that have addressed this in a cross-national analysis.

Previous analysis looking at mediating influences on the values-voting relationship has largely focused on individual values as opposed to political values. There are a number of studies from the Schwartz literature that consider the factors mediating the relationship between individual values and voting. Barnea and Schwartz (1998) demonstrated that in the electoral context of the 1988 Israeli General Elections, the important values that structured left-right political division were Tradition and Security for the Right and Universalism and Self-direction for the Left. In this instance, the mediating influences were the political dimensions of support for classical liberalism (which can be interpreted as a political ideology primer) and the relationship between church and state (which can be interpreted as a religious primer). The values of voters were primed by the saliency of these issues in Israeli politics. A further political issue, economic egalitarianism, was found to have no relationship with values as it was not a defining feature of party competition at that election. This suggested that the underlying value dimensions of left-right competition in that election were values of openness to change (left voting) against values of conservation (right vote). This

contrasts with the findings from Italy of Schwartz, Caprara and Vecchione (2010). They found that the key mediating variables are core political value dimensions but a more nuanced eight political dimensions are measured. In Italy the key political dimensions of blind patriotism, law and order, traditional morality and free enterprise were underpinned by values of Security, Conformity and Traditionalism, which predicted right voting. Core political values of equality, civil liberties and acceptance of immigrants were underpinned by the values of Universalism and Benevolence, which predicted left voting. Therefore, the overall dimension of political competition in Italy was the more traditional values of conservation (right voting) against values of self-transcendence (left voting). Subsequent cross-national work has shown this mechanism can vary between different countries but establishes that basic values underpin core political values (Schwartz, Caprara and Vecchione, 2010). Other studies show the connection between values, personality traits and candidate preferences and their relevance to voting (Caprara and Zimbardo, 2004; Caprara *et al.*, 2006; Schwartz, Caprara and Vecchione, 2010; Vecchione, Gonzalez Castro and Caprara, 2011).

In short, the Schwartz literature effectively demonstrates that political identity and personality, defined in a number of different ways, matters for the priming of values in vote choice decisions. However, research using the Schwartz values has concentrated on the relationship between basic values and political values (Schwartz, Caprara and Vecchione, 2010). Leimgruber (2011) has critiqued this strain of the Schwartz literature by suggesting that it has not estimated a full path model using a structural equation approach. Leimgruber's contribution to the literature was to estimate an SEM model that demonstrates the mediating influence of core political values on the relationship between the Schwartz values and vote choice. This study is aiming to integrate this approach with the core political values literature by proposing an additional pathway. Namely, that the influence of subjective left-right political identity as a mediator of the relationship between political values and voting is deserving of research attention. This allows for cross-national comparison of the degree to which the relationship between political values and voting varies across different party systems.

The significance of left-right identity

The study is treating left-right as a universal element of West European political culture rather than a political dimension made up of specific identifiable components. Left-right is relevant as the common ground on which political competition is defined in West European Democracies and is therefore a good basis for use as a mediator in a comparative study. Despite changes in party systems and variations in issue priorities between countries, left-right has remained a surprisingly durable and accurate concept

for describing the dimensions of party competition and as a form of political identity (Knutsen, 1998; Freire, 2006). This would appear related to its malleability as a heuristic of political culture: political parties, the media and the electorate have been able to consistently redefine the parameters of 'left' and 'right' yet studies consistently show that citizens still understand and identify with these terms as signifiers of political identity and as the markers of political competition (Benoit and Laver, 2006; Dalton, Farrell and McAllister, 2011). A further reason that left-right represents a substantively interesting mediator of the relationship between values and voting is that it is reflective of specific issue competition that exists within national level political systems. Van der Brug (1999, 2001) demonstrates that the national issue agenda's may vary between countries but there remains consistency in the left-right ideological organisation of party competition in relation to those agendas. In other words, it is argued that the basic shape of the political space remains constant between West European democracies even if the issue agenda itself varies according to the local context – and it is due to the ubiquity of left-right as an organising heuristic among both parties and voters. It has subsequently been demonstrated more systematically in cross-national analysis that the left-right dimension has the capacity to take on alternative meanings in different national electoral contexts (Schmitt and Van der Eijk, 2010). It is therefore important to acknowledge that values are not the only factor influencing perceptions of left-right – voter perceptions of the issue agenda are also critical, although those perceptions themselves may be increasingly based on cultural concerns that can be linked to values (De Vries, Hakhverdian and Lancee, 2013). In this sense left-right as a variable represents a vital tool for comparative researchers because it captures an additional level of abstraction that allows cross-national analysis to overcome the difficulty of comparing the importance of issue agendas across different political contexts.

This level of abstraction left-right represents allows analysis to potentially move beyond a focus on specific issue agendas that are bounded within a single national context and consider wider variance in the structure of public opinion cross-nationally (Inglehart and Klingemann, 1976; Castles and Mair, 1984; Thorisdottir *et al.*, 2007). The role of political issues is dependent on country level factors which impact their saliency to electoral politics and the political dynamics attached to them (Van der Brug, 1999). Their impact on voting is in turn driven by specific national electoral contexts, elite political competition and campaign effects (Druckman, Petersen and Slothuus, 2013). As a result comparing the influence of these specific issue agendas across different national contexts generally has little valid meaning in comparative research, especially in regards to analysing voting. The concept of left-right contains a generalisable quality that grants comparative researchers a powerful construct for comparing political attitudes on the contemporary political issue agenda across different national level political contexts (Schmitt and Van der Eijk, 2010). This is

clearly of particular relevance to this cross-national analysis. The fact that the meaning of left-right varies across political contexts is a positive virtue because it allows for significant variation in the content of national level political competition to be controlled for, to some extent, in empirical cross-national models (Knutson, 1995b, 1995c). The assumption is that the underlying meaning of left-right is subject to national level variation but the broad meaning of left-right remains relatively stable and consistent across West European Democracies. This assumption can be made because left-right represents a universal political heuristic for organising political attitudes in West European Democracies. Despite there being some evidence that it can vary in strength it remains a critical heuristic in electoral politics for both parties and voters (Hellwig, 2008). This makes left-right one of the few (possibly only) attitudinal political variables that has recognisable cross-national validity as a mediator but still captures aspects of the expression of an individual's wider political identity. An individual's expressed position on the left-right scale reflects their relative position in relation to the relevant competitive issue agenda in any given national context. In the model being tested in this study, political values represent a step further back in terms of abstraction. This is the primary justification for why left-right represents the most appropriate mediator in this analysis.

As was highlighted above there has been previous research into the interaction between underlying values and left-right political identity. This research uses Schwartz basic values structures rather than core political values (Pioro, Schwartz and Davidov, 2011; Aspelund, Lindeman and Verkasalo, 2013). However, both of these cited studies are cross-national and highlight the potential that values have in explaining underlying dimensions of left-right in Western Europe. Outside of Western Europe this connection was less clear due to left-right having lower saliency; crucially neither of these studies takes the additional step of specifying the relevance of this to political behaviour. Other work in this vein either represents left-right as a direct proxy for values, (Van Deth and Scarbrough, 1995b) or as an economic dimension of politics that structures a multi-dimensional political space with a postmaterialist values or authoritarian-libertarian dimension (Heath, Jowell and Curtice, 1985; Inglehart, 1997; Konstantinidis, 2011). Empirical research has subsequently validated the assumptions in the Van Deth and Scarbrough (1995a) approach by showing that values do underpin left-right (Pioro, Schwartz and Davidov, 2011). However, it has also shown that it is important to specify the relationship between values and left-right as this would appear to vary across different electoral contexts (Pioro, Schwartz and Davidov, 2011). Vecchione *et al.* (2013) is the only study identified from the literature that tests the role of left-right in mediating the relationship between values and voting using the Schwartz values and it does so in a single *n* context. In doing so it establishes the role of left-right in mediating the reciprocal relationship between values and voting. This further establishes why left-right mediation represents a valid

approach to considering the cross-national relationship between political values and voting. It also refutes a conceptualisation of left-right as purely an economic materialist dimension with only a weak association with values.

Left-right clearly has a deeper role as a political heuristic onto which a large number of (sometimes contradictory) factors are loaded. The meaning of left-right is subject to change but its significance to political culture remains surprisingly consistent (Dalton, 2006; Hellwig, 2008; Surridge, 2012). Political identity has therefore been chosen as the primary mediator for this study because its relationship to values has already been established and its subsequent influence on vote choice can be clearly hypothesised (Pioro, Schwartz and Davidov, 2011; Aspelund, Lindeman and Verkasalo, 2013). Left-right is a measure of political identity that remains remarkably stable over time and national context. It therefore represents a good comparative basis for exploring a gap in the literature: cross-national variation in the mechanisms that link political values to vote choice. This leads to the second core research question that the study is intending to address:

Does left-right mediate the relationship between values and voting in West European democracies? (Chapter 5)

Section 4 The context of values and voting

The impact of political context on values and voting

The political identities model, outlined in the previous section, is a way of analysing the values-voting mechanism cross-nationally from the point of view of individual level heuristics that render values relevant to vote choice. However, this alone is not sufficient to measure wider variation in the impact of political values on voting. The key role of political context in influencing this mechanism must also be taken into consideration. Prior research has shown that party system context plays a role in explaining how voters connect their left-right identity to their political preferences (Dalton, Farrell and McAllister, 2011). In more polarised political systems voters find it easier to identify their own left-right position with the positions of political parties. This is relevant, as values are formed in specific social contexts. It has been well established that this socialisation process is vital to how individuals subsequently connect their values to behaviours and actions (Inglehart, 1971; Rokeach, 1973). There is substantial evidence that even those values that could be considered as purely 'political values' are formed in the social context of early socialisation experiences: passed on by parents and formed in response to early life experiences or as functions of the community norms that an individual grew up with (Campbell *et al.*, 1960; Rose and McAllister, 1990; Anderson and Heath, 2003). However, when

individuals make political decisions they do not do so in a vacuum and evidence consistently suggests that there is no reason to assume that they can automatically associate their values with political choices (Converse, 1964; Knutsen and Kumlin, 2005; Petersen, Slothuus and Togeby, 2010). It is therefore important that the additional influence of political context is taken into consideration, as it is likely to define when and how values become relevant to the voters decision making. This is based on the key theory that the context in which a political contest takes place defines the salient issues of political competition and the party choices that are available to them, which represents a major strand in the electoral studies literature (Agnew, 2002; Johnston and Pattie, 2006; Chinni and Gimpel, 2010; Evans and De Graaf, 2013).

The main focus of existing values research has been on single *n* national level studies. Even allowing for their limited comparative potential, these studies offer interesting anecdotal evidence that the values-voting relationship is influenced by political or electoral context (Barnea and Schwartz, 1998; Caprara *et al.*, 2006; Leimgruber, 2011). However, few studies have yet tested the impact of context on the values-voting mechanism in a systematic manner. Schwartz and colleagues (Schwartz *et al.*, 2014) have recently demonstrated the connection between individual values and core political values across different electoral contexts and there is cross-national research on the underlying value dimensions of left-right identity (Pioro, Schwartz and Davidov, 2011; Aspelund, Lindeman and Verkasalo, 2013). Aspelund, Lindeman and Verkasalo (2013) follow a near identical research design to the Pioro study discussed in the previous section but consider the role of values as predictors of political conservatism. As with the Pioro, Schwartz and Davidov (2011) study they demonstrate substantial variation in this relationship between Eastern and Western European countries but also between different sub-types of Western European countries. However, few studies have considered how specific features of party systems, such as party polarisation, may account for this form of variation in party support. Knutsen and Kumlin (2005) have come closest to developing a systematic approach to looking at the impact of political context on the values-voting relationship with a study of 6 Northern European countries. Their exploratory analysis, using a number of proxy measures for values (such as religious identity and attitudes towards the environment), suggested that party system polarisation can account for a significant amount of national level variance between values and voting over time.

Values and contextual choice approaches

There are many contextual factors that could have an influence on the strength or the structure of the relationship between values and voting. One of the more straightforward approaches would be to follow in the long tradition of cleavage theory;

given the clear connection certain cleavages have with values formation and activation. For example, it is reasonable to assume that the relationship between values and voting could be strongly influenced by the religious history of a country (Lipset and Rokkan, 1967; Raymond, 2011). There has been recent cross-national work on cleavage politics that emphasises the importance of social factors and that focuses on the effect of class or the emergence of new political-cultural divisions as key variables driving variation in outcomes (Kriesi *et al.*, 2008; Evans and De Graaf, 2013). This work has gone a substantial way towards demonstrating the continued significance of cleavage politics by challenging the criticisms that claim social approaches are too deterministic and cannot take account of change (Himmelweit, Humphreys and Jaeger, 1985; Clarke *et al.*, 2009). The edited collection of Evans and De Graaf (2013) directly counters the idea that cleavage voting theories cannot account for political change by demonstrating that changing voting patterns in many democracies can be explained through parties' reaction to wider transformation in the class and religious base of Western societies (De Graaf, Jansen and Need, 2013; Evans and De Graaf, 2013; Weakliem, 2013). In this argument it is the responses of parties to changes in the social context of the electorate that primarily drives the relationship between social identities and vote choice, not the weakening or loosening of those identities that has been proposed by others (Franklin, Mackie and Valen, 1992; Bauman, 2000). This is framed by the political choice argument: that a voter's ability and incentive to connect their identities and interests to party preferences is based on the extent to which a party actively and explicitly represents the interests of those identities.

It is argued here that the same principle applies to the values of voters. This is in line with original sociological theories of voting, associated with the Michigan studies that positioned values in middle of the causal funnel of voting linking social identities with political judgements (Campbell *et al.*, 1960). While values may, at least partially, be a function of class socialisation they require priming in a political context (Barnea and Schwartz, 1998). As outlined in the previous section, this priming can be provided indirectly through individual left-right political identity or directly via an association of a particular value preference (positive or negative) with a party preference. Therefore it is the political context that defines whether values become relevant; the social context of voters is not sufficient to guarantee the relevance of specific values to political decision making in the absence of political cues. This connects with the argument that states that social cleavages themselves only become relevant if the party system reflects those divisions (Evans and De Graaf, 2013). It leads to a restatement of the importance of party strategies in defining both the short-term and long-term electoral context for voters (Budge, Robertson and Hearl, 1987). Therefore, insofar as social cleavages play a part in defining the parameters of this study, it is assumed that class and religious socialisation play a key role in framing the values of

voters (Dogan, 1998; Anderson and Heath, 2003; Norris and Inglehart, 2004). It could even be argued in reference to the Michigan Model (Campbell *et al.*, 1960) that increasingly it is a sense of values, rather than an explicit attachment to party or political ideology, that provides the cognitive anchor through which voters attach their cleavage identities to their preferences. This is why a political choice approach necessitates a focus on the influence of political context over the social context; it is the political context that determines whether values are relevant to the political behaviour of voters.

There is a similar approach taken in the literature related to new political cleavages, although this emphasises a more complex interplay between identities, party choice and political change because of its explicit focus on the role of external factors in driving change (Inglehart, 2004; Kriesi *et al.*, 2008). Kriesi *et al.* (2008) argue that new political cleavages have developed partly as a result of established parties amending their platforms in response to globalisation; which has produced a cleavage based on Integration-Demarcation as well as traditional left-right economic concerns. Arguably, Kriesi uses a political choice perspective when claiming this: he contends that established parties are partly responsible for the development of this cleavage by pursuing catch-all strategies that increasingly emphasise integrationist positions (Kriesi *et al.*, 2012). They enact these strategies because they perceive globalisation as forcing further economic integration, thus weakening traditional ties and increasing support for further social and cultural integration. This fits within the broader constructivist literature of globalisation as a self-fulfilling prophecy that destabilises political institutions such as party allegiance (Hay, 2007). In other words, parties are seeking the vote of the median voter and the median voter is perceived as integrationist and a 'winner' of globalisation (Hug and Kriesi, 2010). They are therefore drifting away from the core political values of their more partisan supporters. Broadly, this implies that in Western European democracies established Centre Left parties of the Socialist and Social Democrat tradition have moved towards an acceptance of a liberal market economy; whereas established parties of the right have steadily moved away from more traditional social and cultural values (Kitschelt, 1994; Gamble, 2010). This has created a gap in the political space into which challenger parties can enter the political system by appealing to those voters who feel alienated and threatened by integrationist policy and they often do so through emphasising the distinctiveness of their values (Bowyer and Vail, 2011; Ford and Goodwin, 2014).

It would appear that there is currently a distinct division between Northern and Southern Europe. Challenger parties who appeal to aspects of these sentiments within the Southern European electorate tend to be categorised as on the left (at least nominally): Syriza, 5 Star Movement, Podemos. Whereas in Northern Europe they

appear to be coming largely from the right: UKIP, AfD, the reconstituted Front National, Swedish Democrats (Bowyer and Vail, 2011). Inglehart's (1971) postmaterialist theory and empirical work can provide the theoretical bridge between the literature on new political cleavages and values. The emergence of the new values divide of materialist-postmaterialist was the first attempt to classify and account for the emergence of new political dimensions; it is these opposing value orientations that define a whole host of new political interests and divisions. Arguably, it was the emergence of 'new politics' that led to the fragmentation of the old left-right party system through the introduction of issue agendas that did not map neatly onto the classic economic cleavage of party systems because they were reflective of new political values within electoral competition (Kitschelt and Hellemans, 1990). The practical result has been the emergence in many countries of the integration-demarcation political dimension identified by Kriesi (Kriesi *et al.*, 2008, 2012). This perspective also provides the link between values and political choice theory set out above: it is plausible that the variation in the choices faced by voters will impact which political values are primed in electoral competition just as they influence the extent to which social cleavages retain their strength and relevance to vote choice (Evans and De Graaf, 2013).

Party system effects

The specific focus here is on national level political contextual factors. The analysis will be measuring the effect of Political Polarisation and Effective Number of Parties on the strength of the values-voting relationship. In general, past research tends to show that polarisation has a stronger effect on vote choice than the number of parties (Lachat, 2008; Dalton, Farrell, McAllister, 2011). It would certainly be expected that political values would have a stronger effect on vote choice in countries with higher levels of polarisation, as both the political messaging and the perceived stakes are likely to be higher (Dalton, 2006; Hellwig, 2008). The expectation related to the number of parties is not as clearly linked to prior research or existing theory. However, if a greater number of party choices are available then it is likely to motivate parties to clearly differentiate themselves; activating core political values among segments of the electorate allows parties to develop a base in more competitive party systems (Sartori, 1976). Therefore it is likely that values will have a stronger effect on vote choice preferences in countries in which voters are presented with a larger number of viable electoral choices. Based on recent developments and insights from the cross-national literature on political changes it is also likely that the influence of political context will be more important to smaller parties that stand further from the centre of political division than larger mainstream parties.

This section has demonstrated that the cross-national literature on political values and voting remains relatively sparse. However, prior cross-national literature related to the emergence of new political cleavages and party system transformation implies that there are strong reasons to assume that political context has a substantively important influence on the relationship between values and context. This study aims to address this current gap in the cross-national literature on the values-voting relationship by empirically testing this relationship. This leads to the final core research question:

Is there cross-national variation in the mechanisms linking political values and voter choice? (Chapter 6)

Conclusion

The literature review has highlighted that research into the role of individual values on vote choice is relatively fragmented across a number of different research traditions. There have been a substantial number of studies that have made significant theoretical and empirical contributions to the understanding of the role of values on voting. However, this has often occurred in relation to specific contexts or research agendas that have not always connected with each other. Therefore, while there is a substantial body of work related to how and why political values are relevant to vote choice in specific contexts, there has been less concentration on comparative, cross-national work. The review has identified two areas in which a comparative cross-national approach may be able to make a contribution to the understanding of the relationship between political values and voting: one on the demand-side, one on the supply. On the demand side it is argued that a cross-national perspective can contribute to understanding the cognitive mechanism through which values are converted into vote choice and to assess whether this is subject to variation by national political context. On the supply side, it is argued that a cross-national approach could provide insight into the role of political context in shaping the overall relationship between values and voting.

This Chapter has demonstrated that values can appear elusive concepts in social science, and that interest in them as key empirical measures has waxed and waned over the years (Hitlin and Piliavin, 2004). Yet values remain a core component of political analysis. Within political research in general values have likely proved most influential in terms of their role as explanations of political change, particularly work associated with postmaterialism (Inglehart, 1971). Values have also played a major role in advancing understanding of the structure of public opinion, which is unsurprising given their primary definition as underlying structures of political belief. More significant is that they have consistently been shown to be at least as relevant as

ideology in this regard (Converse, 1964; Conover and Feldman, 1981; Evans, Heath and Lalljee, 1996). This research on underlying structures has also demonstrated that values have a theoretical and empirical distinction from political ideology. The significance of values to electoral studies reflects their role as underlying structural determinants of political division and their position as a key variable in socio-psychological approaches to understanding political choice. This study aims to situate itself within the literature that investigates the mechanisms through which values become relevant to vote choice decisions. Specifically, the literature review highlighted the relative sparsity of cross-national research on the values-voting mechanism. Previous research has tended to concentrate on analysing this mechanism within a single context using individual values rather than political values (Vecchione *et al.*, 2013). Cross-national political values approaches have, due to data or methodological limitations, used direct measures of latent political values with proxy indicators (Van Deth and Scarbrough, 1995a; Knutsen and Kumlin, 2005). This study intends to take advantage of the cross-national data currently available on political values in order to make a contribution to this literature. It intends to do so by attempting to apply a core latent political values measurement model to a cross-national exploration of the complexity of the relationship between values and voting, which draws on key insights from the Schwartz values literature.

To restate, through this literature review it is possible to identify the three broad gaps in the cross-national literature on values and voting that this study will attempt to address:

- 1. *The extent to which there is a common political values structure across West European democracies.***
- 2. *The role political identity (defined as left-right in this study) has in mediating the relationship between values and voting.***
- 3. *The impact of political context on the ability of voters to connect their political values to their vote preferences, with a particular focus on factors which influence the choices available to voters.***

Chapter 2 Methods Review of Values Measures

Introduction

The operationalisation of values presents fundamental challenges to empirical researchers, particularly in political science. As has been laid out in *Chapter 1*, there is a striking breadth and variety in the application and measurement of values and few attempts have been made to compare these methods across different research fields (Hitlin and Piliavin, 2004; Datler, Jagodzinski and Schmidt, 2013). Despite being a relatively fragmented field, research into values has established a striking consensus regarding what values are but this is not matched by consensus regarding how they should be measured. It could be argued that the fragmentation in values research renders the operationalisation issue of marginal interest. It is clearly entirely valid to employ different measures of values for divergent research aims which build on different methodological approaches. However, the fact remains that within the research literature there appears a noticeable degree of consensus regarding the definition of values as organising underlying concepts. This produces an interesting contradiction between the relative uniformity of definition and a relative multiplicity of measurement instruments. The ongoing debate regarding the validity of Inglehart's measures of postmaterialism (Inglehart and Flanagan, 1987; Davis and Davenport, 1999; Datler, Jagodzinski and Schmidt, 2013, Welzel and Inglehart 2016) highlights the centrality of these issues to values research. It is therefore important, in the context of this study, for there to be a comprehensive assessment of the different approaches that have been applied to measuring values in order to justify the approach being applied here and situate it clearly within the prior empirical values literature.

The empirical measurement of values is grounded in the need for methodological compromise. This is generally a case of researchers being restricted by data limitations. As has been consistently acknowledged in the literature, complete theories regarding the conceptual distinctiveness of values are almost impossible to fully operationalise through survey instruments (Rokeach, 1973; Schwartz, 1992; Rossteutscher, 2004). There is little doubt that direct indicators regarding political values are difficult to capture within conventional survey research – both with regard to the structure of the questions themselves and the amount of space they can take up within a survey. The issue is rendered more complex by the lack of consensus regarding which values should be measured and how they can best be captured. There is no universally acknowledged battery of questions that are regarded as 'political values questions'. Across different research fields there is considerable divergence regarding whether an absolute number of values exists, the extent to

which there are different types of values and whether they should be treated as constant across all cultures (Rokeach, 1973; Davidov *et al.*, 2008; Feldman and Johnston, 2014). So while there is broad agreement that values represent underlying organising structures that constrain individual attitudes, opinions and beliefs, there is a significant debate regarding which political value dimensions actually exist. In this context, it is not surprising that political researchers have been flexible regarding the operationalisation of values but makes it important that this study can justify applying a latent measurement approach.

The theories that are utilised and quoted by researchers are comprehensive when it comes to differentiating values from similar concepts such as attitudes, beliefs and ideologies (Rokeach, 1973; Tetlock, 1986; Schwartz, 1992). This presents a potential problem for studies like this that use a latent approach to measurement. Latent values measures are nearly always constructed from a series of attitudinal indicators, which risks the potential of conceptual conflation with attitudes, ideologies and beliefs (Voas, 2014). This is particularly the case as this study is looking to make a contribution by extending this approach into cross-national analysis. It is therefore important for the study to develop a set of principles for values measurement which are based on precedent and justify the latent approach to values measurement and can be compared cross-nationally. This has implications regarding the external validity of this study and the knowledge claims it can reasonably make.

The chapter will proceed by outlining the background to this issue with a brief defence of the latent measurement approach. It then moves on to present the results of a methods review that represents a form of meta-analysis of 57 'values papers' from high ranking political journals. The final section uses this analysis to produce a set of ideal principles for establishing robust measures on which this study will base the operationalisation of values. The chapter aims to address the following research questions:

1. *Which values can be operationalised using secondary survey data and how have they been measured?*
2. *How can values measures be distinguished from measures of attitudes and ideology in empirical research designs?*
3. *What are the fundamental principles for operationalising values as a latent concept in a quantitative research design using secondary data?*

A defence of the Latent approach to values measurement

If research that focuses purely on values ordering is excluded, then the latent approach represents the most common method for measuring values in political research. On occasion, this involves justifying the use of a single measure as a direct proxy for capturing individual value dimensions, such as attitudes towards abortion as a measure for 'moral traditionalism' (Alvarez and Brehm, 1995). In some cases, statements of belief have been operationalised as representing values dimensions, though this is rarer (Knutsen, 1995a, 1995b; Barker and Carman, 2000). However, the more common method is for researchers to construct these latent values dimensions from a battery of attitudinal questions and then establish the values measures through the creation of an index or, more recently, the application of factor analysis (Hurwitz and Peffley, 1987; Heath, Evans and Martin, 1994; Braithwaite, 1998; Peffley, Knigge and Hurwitz, 2001). The 'proxy' approach has become increasingly rare, and harder to justify theoretically. Most political values researchers who are forced to use a single measure acknowledge the limitations in light of Ansolabehere, Rodden and Snyder's (2008) paper, which demonstrated the importance of using multiple indicators for establishing construct validity.

Examples of the latent approach involve political researchers making creative use of the wealth of survey instruments that exist to measure ideological positioning or attitudinal positions in order to tap latent values constructs (Jacoby, 2006; Swedlow and Wyckoff, 2009). This is consistent with the definition of values as representing underlying constructs constraining attitudes, ideology and behaviour and captures the crucial aspect of psychological constraint (Converse, 1964; Rokeach, 1973; Schwartz, 1992). The robust nature of the latent measures that are produced from these approaches, and their predictive utility, suggest this is a valid way of tapping underlying values dimensions, although there is clearly an issue regarding the extent to which they are bounded within a specific political context. This contributes to the debate regarding whether values can, or should, be directly measured (Braithwaite, 1998; Rossteutscher, 2004; Davidov *et al.*, 2008; Datler, Jagodzinski and Schmidt, 2013). In political values research the general position is one of pragmatism: researchers will utilise the best measure of values available to them. Values are generally operationalised as predictive measures that explain wider supply-side or aggregate level processes, rather than as dependent variables. There is little focus on the role of measuring value change at the individual level – where producing direct measures of value preferences could prove more critical. However, this still raises the key issue of methodological validity, and ultimately whether values are being fully operationalised by latent measures.

The three most influential political values theorists (Rokeach, Inglehart and Schwartz) all argue that, while individual values are essentially underlying constructs, they should ideally be measured directly in some form. The survey questions they designed to operationalise values are structured to allow respondents to directly address value preferences, and also include aspects of value ordering. However, there is an alternative case against the use of these direct values measures. According to many core findings of public opinion research there are sound reasons to suppose that most respondents would be unable to coherently express abstract value preferences directly (Converse, 1964; Feldman, 1988; Zaller, 1992). In this perspective is not just a case of the latent approach being acceptable in the absence of direct measures but of the latent approach being more appropriate for measuring political values because it captures the diversity in the underlying dimensions of political opinion (Feldman and Johnston, 2014). In constructing measures from a battery of attitudinal indicators, latent values capture this aspect of values constraint. This emphasises the importance of political value conflict on a number of dimensions and renders them relevant to political researchers (Goren, 2005).

By integrating the approaches from mass public opinion research the case for operationalising values as a latent construct in political research becomes clear (Converse, 1964; Zaller, 1992). Political researchers can move away from the holistic structures of the social psychology approach to individual values and limit their focus to specific 'political values' but at the potential cost of generalisability. The challenge for this study is to develop robust latent indicators from existing attitudinal indicators in the European Values Survey.

Analysis

Methodology of Methods Analysis

In order to assess the different approaches to measuring values a methods analysis was carried out. The data for the analysis was compiled from quantitative research papers that operationalise values either as a dependent or predictor variable. These papers were drawn from the top hundred politics journals. To be included in the analysis, the journal article had to have used a measure for 'individual values' or 'political values'. No chronological limit was set on the search parameters: the most recent paper was from 2012 and the oldest from 1981. However, the bulk of the empirical values literature is relatively recent and only two papers in the analysis predated 1990. Fifty-seven papers were originally identified as operationalising values measures. Seven of those papers were subsequently excluded from the analysis. Two because they used the content analysis of text rather than survey questions so did not

offer a realistic comparison. A further three were excluded because they were using the term 'political values' as an acknowledged proxy for placement on the left-right scale. It has been stated that this study considers left-right as representing a subjective political identity that can be predicted by values, rather than a distinctive value dimension in itself. While this is theoretically contestable, these papers were excluded for consistency. Finally, two papers were excluded on the basis that they were focused on analysing the values of political elites rather than representing mass opinion research. The methodology they used made it inappropriate to compare with research based on an analysis of mass survey data. Overall the convenient number of 50 appropriate research papers was identified⁴. See *Appendix 1* for the full list of articles used.

This analysis is not designed to be an exhaustive study of every research paper that has operationalised empirical values measures; to ensure relevance to this study the papers were limited to the field of politics. Only those papers that gave a central role to values (as a dependent variable or primary predictor) were included and papers were only selected if they operationalised values via survey instruments. However, these papers represent a comprehensive sample of the empirical values literature, and they are all in some form relevant to this study.

A number of assessment criteria were created in order to delineate the approach taken by each paper. These criteria are set out below.

Value Dimension Measured refers to the actual values that were being measured. For example: 'Materialism-Postmaterialism', 'Egalitarianism', 'Traditionalism' and Liberty'. There is no official definition of what can be accurately categorised as a 'value' and what cannot⁵. There are examples of papers that claim concepts to be 'values' in contradiction with established conceptual definitions. For example, it is arguable whether the Authoritarian-Libertarian scale represents a values dimension in all research contexts; some claim it is a measure of ideology (Flanagan and Lee, 2003). However, few would dispute that there are such values as 'authority' and 'liberty' as distinct from ideology (SurrIDGE, 2012). The operational distinction between the two resides in the indicators used to construct them. Likewise, claims that there is a distinctive 'Pro-Life' value are difficult to disentangle from attitudinal or belief positions

⁴ There are two exceptions to these rules. One paper was drawn from the book 'Impact of Values' (Van Deth and Scarbrough, 1995b). This paper was included because it is one of the few that specifically addresses the association between value change and voter choice. Likewise one paper included in this analysis, (Leimgruber, 2011), was selected from the *Journal of Swiss Politics* which is not a top 100 politics journal. It was included because the subject matter and conceptualisation of values informed the design of this study.

⁵ It has been argued that such a list would be rendered irrelevant anyway, because the advantage of studying values is that they are dependent on social context (Rokeach, 1973).

(Alvarez and Brehm, 1995). There is clearly a debate to be had over what can be reasonably claimed as a 'value' and over the distinction between universal values and those that are dependent on specific political and social contexts. The important point to make is that no substantive judgements were made at the data gathering stage of the analysis. If a paper claimed to be defining a construct as a value then it was included in the analysis as a value.

Exact Questions Used refers to the wording of the questions used to capture each of the values measures.

Typology of Question is derived from the previous measure to categorise the type of questions that were used to operationalise the values measures. This is a simple 5-point typology:

1. *Value Ordering* is defined as those value measures that are constructed from questions that require respondents to order a set of value priorities; the vast majority of these examples refer to papers that used Inglehart's Materialism-Postmaterialism index.
2. *Latent Values from Attitudes* is defined as values measures that are constructed from a series of attitudinal questions. These either use an indexed score for the value measure or utilise a form of factor analysis to construct scores for each value. This is typified by the more directly political measures that operationalise values such as 'Equality of Opportunity' or 'Limited Government'.
3. *Direct Values Measures* is defined as those values measures that are constructed from questions that ask the respondent to directly identify their values. For example, the Schwartz (1992) values question battery.
4. *Personal Behaviour as Proxy* is defined as those measures that use an aspect of individual behaviour as indicative of a value. The main example being religious attendance used as a proxy for conservative social attitudes or a broad definition of 'religious' values.
5. *Belief as a Proxy for Values* is defined as those measures that use expressions of religious belief as a values measure. As above, this is generally conceptualised as representing a religious values system or conservative social views.

Unsurprisingly there are few examples of types 4 and 5. A substantial number of papers used multiple question types to capture a broad range of values, which is reflected in the analysis.

Methods used to Construct Values Measures refers to the way in which values scores were constructed. For example, Confirmatory Factor Analysis.

Application of Values Measures refers to the way in which the values measures are used within the paper: as a predictor or as the dependent variable.

Type of Article refers to the type of research the paper is engaged in. For example value change or the underlying basis of political allegiances.

Subject of Article refers to the exact topic that the paper was investigating.

Definition of Values refers to how the paper conceptualises values. This is important in terms of the extent to which the definition of values matches their empirical operationalisation. The key differentiation here is between articles that conceptualise values as being in conflict, those that see them as context dependent and those that view them as part of a universal values system.

Core Values Work Drawn On refers to the values theorists the paper is following. This defines the values research strand with which the paper is engaging.

Cross-national and **Cross-sectional** refer to whether the research used cross-national or cross-sectional data.

Data Set used – refers to the origin of the data from which the values measures were drawn.

These categories were used to produce the data from which the results below are drawn⁶.

⁶ Raw data can be provided on request.

Results

Measures of Values

Tables 2.1 and 2.2 show the percentage of articles by different value measurement types. 58% of articles utilised only one type of values measure, 42 % used more than one, with 10% using 3 or more different types of measure. This reflects the range of approaches that researchers have taken.

Table 2.1 Percentage of articles by number of different values measures used

Number of different values measures	Overall Tally	%
1 type	29	58
2 types	16	32
3 or more types	5	10

Table 2.2 Percentage of articles by value measurement type

Value Measurement Type	%
Value ordering	60
Latent values from attitudes	48
Direct values measures	38
Personal behaviour as values proxy	4
Belief as proxy for values	2

As regards the individual values types: 60% of articles utilised some aspect of value ordering. However, this is slightly inflated as all articles utilising the Schwartz values contain an aspect of value ordering. Each value dimension in the Schwartz structure is calculated by creating an average score for the response designed to capture each specific value. The overall score for that value is then created by subtracting the mean response score across all the values questions from the indexed score (Schwartz, 2003). This is done in order to control for response bias, but adds an aspect of value ordering to the measure. Unlike other forms of value ordering, such as the Postmaterialism Index, this is done indirectly. It provides a measure of the relative value priorities of each respondent but it does not reflect a conscious decision by the respondent to rank one value above another. Even if the Schwartz articles were excluded from this count, value ordering would still represent the most commonly occurring value measurement type in the literature with 44% of articles. In 32% of the total articles value ordering is the only form of values measure that is

utilised. In 53% of the articles featuring value-ordering measures, they are the only measuring type used. No other measurement type is used on its own in the majority of the articles in which it features. This reflects the relative ubiquity of the Postmaterialism Index within the political values literature. It also highlights the importance many researchers assign to the idea that values demonstrate ambiguity and conflict in the worldview of individuals.

Latent values from attitudes and direct values measures are each used in 48% and 38% of articles respectively. In 51% of the articles that use attitudes to construct latent measures for values some other form of values measurement is also used. The two proxy values types appear far less frequently, and are generally used to supplement or validate other values measures or to represent broader societal change such as secularisation.

A version of the Schwartz values is featured in 18% of the articles, and a version of the Materialist-Postmaterialist battery is included in 24%. No article in the analysis utilised both of these measures. This highlights three issues. Firstly, that the Schwartz values require a great deal of survey space to be adequately operationalised and are therefore often only included in study specific surveys (Datler, Jagodzinski and Schmidt, 2013). Secondly, those large-scale surveys that do include the Schwartz values often do not include the Materialist-Postmaterialist index. Finally, it highlights the extent to which the Materialism-Postmaterialism dimension can be reflected in the Schwartz values.

In general these findings show that the majority of articles did not utilise a recognised question battery for defining values. In addition to those that developed latent values measures, many studies used value-ordering techniques to tap value conflict, for example, liberty – authority or freedom-order. In addition there was some use of other, less commonly deployed, measures of values such as the Klages Scale from Germany or the Social Values Index from Australia. Overall, it highlights the wide diversity of measurement that has been applied within the literature.

These findings present a relatively optimistic overview of the operationalisation of values. It is possible to identify clear and distinct approaches to the measurement of values that are consistent with their definition. It also shows that the diversity of measurement reflects a genuinely plural field as much as values representing a conceptually fuzzy concept. It is now important to look at exactly which values are captured, and whether they map on to recognised political divides.

Which Values are Operationalised

Table 2.3 provides a comprehensive list of the values that have been captured in these papers.

Table 2.3 Complete list of values

Achievement	Liberal Values
Authoritarianism	Liberty
Autonomy	Materialism-Non Material (<i>Not M-PM</i>)
Benevolence	Materialism-Postmaterialism
Blind Patriotism	Moral Tolerance
Civil Liberties	Moral Traditionalism
Class Loyalty	Moralism
Conformity	Nationalist Values
Conservation	Openness
Cultural Political Values	Openness to Change
Economic Political Values	Patriotism
Economic Security	Power
Egalitarianism	Pro-Choice
Environmentalism	Pro-Life
Equal Opportunity	Racial Equality
Equal Rights	Religious Values
Equality	Rule-Following
Ethnocentrism	Security
Exocentric Altruism	Self-Direction
Free Enterprise	Self-Enhancement
Free Speech	Self-Reliance
Freedom	Self-Transcendence
Harmony	Social Order
Hedonism	Socialist Values
Humanitarianism	Stimulation
Individualism	Tradition
Inequality	Traditional Family Values
Law and Order	Traditionalism
Left-Right materialist	Universalism

The headline figures show that 58 separate values have been captured across the 50 papers and the overall number of values used in these papers is 135, which shows that the majority of papers are interested in measuring more than one value. It also demonstrates the diversity in the range of values that have been utilised in the research. However, it is more important to acknowledge the variance in the value types that have been measured. For example, researchers utilising the Schwartz values have the opportunity to create the full 10-point values structure. This allows for measurement of values such as Authority, Power, and Universalism. It also allows them to operationalise the 4 higher order value priorities such as Self-Transcendence and Self-Enhancement. This is important because Schwartz conceptualises values conflict as existing at this higher level.

At the opposite end of the scale, some researchers have parcelled out certain key political values into their component parts. In this way a value such as 'Egalitarianism' can be broken down into 'Equality of Opportunity', 'Equality of Outcome' and 'Equality of Rights'. These are all then treated as separate political values. It is clear that certain concepts can only be operationalised as political values within the appropriate political context, such as 'Limited Government' or 'Pro-Choice'. These represent a specific American values divide, which is reflective of what is commonly referred to as 'the culture wars' (Hibbing, Smith and Alford, 2013).

If a political values approach is applied the importance of the contextual processes that render them relevant becomes critical. This implies that, over time, a set of political attitudes can evolve from policy preferences to become underlying attachments that define a series of political allegiances. For example, in the United States it may be reasonable to claim 'Limited Government' as a value given the language that is used within the political debate and specific political developments. In other countries this will remain a series of policy preferences that are constrained by a broader political values dimension such as 'individualism'.

From these findings it is possible to identify 6 broad political value types. It may be viable to categorise these values to represent clusters of values by social actions or psychological traits. However, in the interest of this study they have been categorised to represent conceivable political values types.

Table 2.4 shows that the 'social conservative/conservation' category is the largest category accounting for 46 of the 135 values that have been measured. It contains 15 different stated values. It also contains the 2 most commonly occurring values: Traditionalism features in 9 different papers and Authority in 7. Other regularly occurring values in this category are Conformity (6), Security (5) and the Schwartz value of Conservation (4). These dimensions capture a broad range of conservative values. There are also a number of examples of less abstract value types in this category. For example, 'Traditional Family Values' captured as a measure distinct from the broader example of 'Traditionalism', with 'Patriotism' and 'Blind Patriotism' distinguished from broader values dimensions such as 'Conformity', 'Security' or 'National Values'. These are examples of researchers applying narrower values measures or labels to answer research problems bounded by a specific political context. In this respect the social conservative values category captures a broad range of values: from higher order groupings to narrow measures of specific value preferences that overlap with attitudinal positions.

Table 2.4 Type 1 Social Conservative/Conservation and Type 2 Liberal/Individual

Type 1: Social Conservative/Conservation values list	Value Measurement Type	Type 2: Liberal/Individual values list	Value Measurement Type
Traditionalism (9)	DV = 5, LA = 4	Individualism (6)	VO=1, DV=2, LA=3
Authority (7)	VO=2, DV = 2, LA = 3	Libertarian (5)	VO=3, LA = 2
Conformity (6)	VO=2,DV=4	Stimulation (4)	DV = 4
Security (5)	DV = 5	Self-Direction (4)	DV = 4
Conservation (4)	DV = 4	Free Enterprise/Limited Government (4)	LA = 4
Patriotism (3)	VO=3	Moral Tolerance (2)	DV = 2
Traditional Morality (3)	LA = 3	Freedom (2)	VO=1, LA 1
Law and Order (2)	LA = 2	Openness to Change (2)	DV = 2
Order (1)	VO= 1	Free Speech (1)	VO=1
Moral Traditionalism (1)	DV = 1	Civil Liberties (1)	LA = 1
Rule-Following (1)	DV = 1	Pro-Choice (1)	LA = 1
Traditional Family Values (1)	DV = 1	Liberty (1)	VO=1
Blind Patriotism (1)	LA = 1	Autonomy (1)	VO=1
Pro-Life (1)	LA = 1	Self-Reliance (1)	DV = 1
Nationalist Values (1)	LA = 1	Liberal Values (1)	LA = 1
Total Values = 15		Total Values = 15	
Total = 46	VO = 8 (17%) DV = 23 (50%) LA = 15 (33%)	Total = 36	VO = 8 (22%) DV= 15 (42%) LA= 13 (36%)

VO = Value Ordering DV = Direct Values Measures LA = Latent Values from Attitudes

Table 2.4 shows that the social liberal/individual category represents the second largest group of values. It also contains 15 different stated values and accounts for 36 of the total value measures. The most commonly occurring values in this category are individualism (6) and libertarianism (5), the Schwartz values of Stimulation (4) and Self-Direction (4) and Free Enterprise/Limited Government (4). This last values measure is probably the most contentious, particularly as there are several examples in the literature of direct proxy measures being used to capture it. Normally this involves questions regarding government spending being conceptualised as a value of limited government. Goren (2005) acknowledges that the Free Enterprise/Limited Government measure does not necessarily represent a measure of values that is directly comparable. It is argued that as well as being important within a number of

political contexts it is capturing a key political dimension of individualism. This can be partially supported by the analysis, which shows that measures of 'Individualism' are often derived from question batteries that tap this dimension. Nevertheless, from the theoretical literature, it is not easy to see how concepts such as 'limited government' can be distinctly classified as values. It represents a compromise regarding conceptual clarity because it is not a sufficiently abstract construct. This does not imply that using attitudinal positions to construct latent values is invalid, just that some caution is required when labelling concepts as a 'value' particularly when applying that measure in multiple contexts. It should be possible to argue that what is being captured is at least primarily a stable underlying construct rather than a reactive attitudinal one. This appears a particular issue with the social liberal/individual values category, which also captures 'Civil-Liberties', 'Free Speech' and 'Pro-Choice'. It could be contended that all of these to some extent conflate attitude and policy positions with values. All of them are potentially constrained by a higher-level values dimension.

The third largest of the values categories is collectivist/self-transcendence shown in *Table 2.5*. It contains 10 stated values and accounts for 28 of the total value measures that were captured in the analysis. In this category, there is a clear division between those values that govern behaviour and attitudes and those that reflect abstract end states. The category therefore comes closest to representing Rokeach's values typology of Instrumental vs. Terminal Values. Universalism and Benevolence would appear to fit closer to an instrumental approach reflective of day-to-day individual behaviour. Whereas, Egalitarianism and Equality would be closer to the idea of terminal values representing desirable views of the world. However, this section still contains a number of values that are more narrowly defined such as 'Equal Rights' and 'Racial Equality'. Categorising the value 'Inequality' in this section highlights an issue with the literature: namely the labelling of values. This value is measured in precisely the same way as another value that was labelled 'Equality'. This is not a trivial point: the lack of universal values measures means there is always the danger of different researchers claiming that the same measure represents a different underlying value. There are a number of examples of survey questions being utilised to construct one value in one paper and a different value in a subsequent study. This can clearly be justified in terms of the refinement of the measure or in terms of the specific research question or political context, but it leads to difficulties regarding the overall comparability of the findings.

Table 2.5 Type 3 Collectivist/Self Transcendence and Type 4 Material/Self Enhancement

Type 3 Collectivist/Self-Transcendence values list	Value Measurement Type	Type 4 Material/Self-Enhancement values list	Value Measurement Type
Equal Opportunity (5)	DV = 1, LA = 4	Materialism (13)	VO=13
Egalitarianism (5)	DV = 1, LA = 4	Power (4)	DV = 4
Universalism (4)	DV = 4	Achievement (4)	DV = 4
Benevolence (4)	DV = 4	Hedonism (4)	DV = 4
Self-Transcendence (4)	DV = 4	Economic Security (1)	VO=1
Equality (2)	VO=1, LA = 1	Self-Enhancement (1)	DV = 1
Inequality (1)	DV = 1	Left-Right materialist (1)	LA = 1
Racial Equality (1)	VO=1	Economic Individualism (1)	LA = 1
Equal Rights (1)	LA = 1	Economic Political Values (1)	LA = 1
Socialist Values (1)	LA = 1	Class Loyalty (1)	LA = 1
Total Values = 10		Total Values = 10	
Total = 28	VO= 2 (7%) DV= 15 (54%) LA= 11 (39%)	Total= 31	VO= 14 (45%) DV= 13 (42%) LA= 4 (13%)

VO = Value Ordering DV = Direct Values Measures LA = Latent Values from Attitudes

The final three categories are smaller and not as clearly defined politically. Nevertheless, they represent two distinct groupings. The Materialism/Self Enhancement category is the most clearly defined. *Table 2.5* shows it contains 10 stated values and 31 of the total value measures. Nearly half of these occurrences (13) can be accounted for by the number of papers that operationalised Inglehart’s Postmaterialism question battery. They were using a recognised measure for a defined research agenda. This is not the case for the majority of values measures featured in this analysis that were created to address a specific research problem. There is a cross-over between the Material/Self Enhancement category and other categories particularly Liberal/Individual. This applies to values such as economic liberalism and the higher order Schwartz value of Self-Enhancement (which incorporates the values of Hedonism, Power and Achievement). The key distinction made here is that the Materialism category is related to personal circumstances and interests: that is, the importance of building up personal wealth and security. This is why ‘Class Loyalty’ is included in this section as a value that is related to the protection of interests. The liberal/individual category largely refers to external, outwardly facing values.

The Postmaterialism dimension in *Table 2.6* is much smaller and clearly defined. It accounts for 18 of the total values, but 13 of these occurrences are related to the operationalisation of the Inglehart battery and contains only 5 other stated values. Most of these are self-explanatory as they fit within a broad 'Postmaterialist' umbrella. However, the value 'Exocentric Altruism' is worthy of note. This was taken from an Australian study, and represents an alternative way of exploring some of the constituent parts of Postmaterialism (Rossteutscher, 2004). It contrasts internal Postmaterialism, in which individuals want a better quality of life or more influence on political events, with 'Exocentric' which refers to external views of the world. This includes attitudes to poverty, the natural environment and the morality of politicians.

Table 2.6 Type 5 Postmaterialist and Type 6 Other

Type 5 Postmaterial values list	Value Measurement Type	Type 6 Other (Values List)	Value Measurement Type
Postmaterialism (12)	VO=12	Religious Values (1)	VO=1
Humanitarianism (2)	VO=1, DV= 1	Moralism (1)	DV=1
Exocentric Altruism (1)	VO=1	Harmony (1)	DV=1
Non-Materialism (1)	VO=1	Ethnocentrism (1)	LA = 1
Cultural Political Values (1)	LA = 1		
Environmentalism (1)	LA = 1		
Total Values = 6		Total Values = 4	
Total= 18	VO= 15 (83%) DV= 1 (6%) LA= 2 (11%)	Total = 4	VO=1 DV=2, LA=1

VO = Value Ordering, DV = Direct Values Measures. LA = Latent Values from Attitudes

Finally the 'Other' category features the 4 values that do not clearly fit into any of the other categories. Generally this is because they are conceptualised and measured in a way that renders them somewhat vague. In some cases Religious Values have been used as proxy for a form of Social Conservatism. Moralism could be added to some form of conservative moral values dimension, but it was a very broad measure that did not justify being categorised as a form of conservative morality. Ethnocentrism could have applied to the Materialist category in the same sense as Class Loyalty, but the connection between sectional interest and individual material enhancement is not as clear.

This section of the analysis highlights the depth of values that have been measured in political research. Firstly, it shows that values have been operationalised at a number of different levels of abstraction. At the highest level, they represent a broad cluster of value preferences, for example 'Economic Values vs. Cultural Values'. At this level, however, they risk being conflated with political ideology rather than attitudes. Conversely, at the lowest level of abstraction they represent narrower expressions of value preferences in relation to a specific set of societal concerns. For example 'Pro Life' or 'Limited Government'; this risks conflation with attitudes. Secondly, the analysis has shown that the narrower the definition of values that is deployed the more likely it is that their distinctiveness is reliant on a specific political context. Thirdly, there is a tendency in political research to develop value dimensions that reflect known or theorised ideological cleavages. In general, given the diversity of values, values measures and data sources, there is a relative consistency regarding which values are captured. They can be categorised into broad political values groups in a coherent way. This is a positive finding for a study that intends to take a comparative approach to values measurement.

How each value group is measured

Due to the fragmentation in research traditions it was expected that there would be a clear divergence in the form that each category of values was measured. However, this proved not to be the case. With the exception of the Materialism and Postmaterialism categories (which, unsurprisingly contain a strong bias towards the value ordering measurement type) there was no clear distinction. For the social conservative values category 50% of values were captured by direct values questions, 33% by latent values measures and 17% by value ordering approaches. This spread of percentages remains similar across the two other main political values types. In each case the direct values measures remain the most common form of measurement.

Refinement of the values typology

In order to further refine the analysis each of the core 'political' value types (Social Conservative, Liberal/Individualist, and Collectivist) were further split into two segments. In each case, the value type was broken down into Rokeach's (1973) idea of an 'Instrumental' and 'Terminal' component. This is important in order to identify any examples of patterns of common practice in the way in which particular types of values are measured.

Table 2.7 shows that the social conservative value type is split into a 'morality' dimension and a 'Conservation' dimension. The 'Morality' dimension refers to values that include measures designed to capture traditional values. The 'conservation' dimension relates to the significance individuals give to their personal and community security. In making this distinction two points become clear. Firstly, political researchers seem more interested in the conservation dimension than the morality dimension. Secondly, there is a clear distinction in how these two dimensions are measured, with the morality dimension being more likely to be captured as a latent concept through attitude indicators. 56% of the values in the 'Morality' dimension were captured as latent concepts and none were captured using a form of value ordering. Only 17% of the measures in the 'Conservation' dimension were measured using latent constructs, with 54% measured directly. Initially this seems like a clear distinction, as it makes sense to use a latent approach to capture more abstract values. However, further findings do not support this.

Table 2.7 Conservative value typology

Morality - Value List	Value Measurement Type	Conservation- Value List	Value Measurement Type
Traditionalism (9)	DV = 5, LA = 4	Authority (7)	VO=2, DV = 2, LA = 3
Traditional Morality (3)	LA = 3	Conformity (6)	VO=2,DV=4
Moral Traditionalism (1)	DV = 1	Security (5)	DV = 5
Rule-Following (1)	DV = 1	Conservation (4)	DV = 4
Traditional Family Values (1)	DV = 1	Patriotism (3)	VO=3
Blind Patriotism (1)	LA = 1	Law and Order (2)	LA = 2
Pro-Life (1)	LA = 1	Order (1)	VO= 1
Nationalist Values (1)	LA = 1		
Total Values = 8		Total Values = 7	
Total = 18	DV = 8 (44%) LA = 10 (56%)	Total = 28	VO = 8 (29%) DV= 15 (54%) LA = 5 (17%)

VO = Value Ordering, DV = Direct Values Measures. LA = Latent Values from Attitudes

Table 2.8 splits the social liberal dimension into measures of 'Individual Expression' and 'Individual Autonomy'. Individual expression refers to political attitudes; individual autonomy represents values of individual motivation. This is a relatively clear split between the external and the internal. However, there is no distinction in how these two aspects have been measured. If anything, it is the 'Terminal' value type of individual autonomy that is more likely to have been measured using latent constructs. Similarly, Table 2.9 shows the collectivist value type split into a set of internal value positions. The external captures 'Equality'. The internal captures 'Self-Transcendence'. Again, it was the Terminal dimension of Equality that was more likely to be measured using latent constructs. The relative ubiquity of Direct Values measures probably reflect little more than the dominance of the Schwartz values in both of these value types.

Table 2.8 Liberal value typology

Individual Expression (Value List)	Value Measurement Type	Individual Autonomy (Value List)	Value Measurement Type
Individualism (6)	VO=1, DV=2, LA=3	Libertarian (5)	VO=3, LA = 2
Stimulation (4)	DV = 4	Self-Direction (4)	DV = 4
Moral Tolerance (2)	DV = 2	Free Enterprise/Limited Government (4)	LA = 4
Openness to Change (2)	DV = 2	Freedom (2)	VO=1, LA 1
Free Speech (1)	VO=1	Autonomy (1)	VO=1
Civil Liberties (1)	LA = 1	Self-Reliance (1)	DV = 1
Pro-Choice (1)	LA = 1	Liberal Values (1)	LA = 1
Liberty (1)	VO=1		
Total Values = 8		Total Values = 7	
Total = 18	VO= 3 DV=10, LA= 5	Total = 18	VO=5, DV=5 LA=8

VO = Value Ordering DV = Direct Values Measures LA = Latent Values from Attitudes

Table 2.9 Collectivist value typology

Self Transcendence	Value Measurement Type	Equality	Value Measurement Type
Benevolence (4)	DV = 4	Equal Opportunity (5)	DV = 1, LA = 4
Self-Transcendence (4)	DV = 4	Egalitarianism (5)	DV = 1, LA = 4
Universalism (4)	DV = 4	Equality (2) Inequality (1) Racial Equality (1) Equal Rights (1) Socialist Values (1)	VO=1, LA = 1 DV = 1 VO=1 LA = 1 LA = 1
Total Values = 3		Total Values = 7	
Total = 12	DV = 12 100%	Total = 16	VO = 2 (13%) DV = 3 (19%) LA = 11 68%

VO = Value Ordering, DV = Direct Values Measures. LA = Latent Values from Attitudes

The final stage of the analysis involved looking at the research purposes to which the value measures had been applied. Due to this project's focus on context it was decided to concentrate on two core aspects: cross-national and cross-sectional (over more than 1 time-point) analyses.

Cross-National Analysis

Table 2.10 shows that 28% of papers used some aspect of cross-national research; a further two (4%) had a comparative aspect to their study but not a cross-national one. Given that the Schwartz values question battery is embedded in the European Social Survey, it is not surprising to find that there are double the number of papers that use the direct values measures than use a latent approach (although value ordering is the most common approach). It is also not surprising that the cross-national research literature is dominated by long-standing measures of values. Only two of the papers constructed their own values measures or used anything other than the Postmaterialist battery or the Schwartz values. Initially this does not appear an encouraging precedent for a study that intends to develop specific latent values measures for cross-national analysis. However, the two examples in which latent measures were applied came from papers that used the World Values Survey and the European Values Survey, which are the values question batteries this study is using. It does highlight the extent to which the latent approach has generally been confined to a US context and has not often been applied in comparative work. It will be necessary to establish the cross-national comparability of the latent values measures. This is the main challenge this study faces in establishing its external validity.

Table 2.10 Cross-national and cross-sectional studies

Cross National Studies	Number and % in each measurement type	
Value Ordering	12	(85%)
Direct Values	5	(36%)
Latent Values	2	(14%)
Total number of measures	19	
Total studies	14	(28% of total studies)
Cross-Sectional Studies		
Value Ordering	11	(64%)
Direct Values	3	(18%)
Latent Values	6	(35%)
Total number of measures	20	
Total studies	17	(34% of total studies)

Cross-Sectional (over-time) Analysis

The analysis of the cross-sectional papers presents a far more promising picture for the use of latent values. 35% of those papers use a latent approach to values construction. These papers deploy quite a large range of political values and they tend to utilise national election surveys or the national segment of cross-national datasets. There were no examples of study specific data being used, as is often the case in US studies. All these measures were constructed using secondary analysis. Admittedly, the cross-cultural element is not a factor as they were single country studies, but the fact that the latent values measures were robust at different time-points is promising. It also shows that there is a precedent in the methodological literature where values are captured using latent measurement approaches across different contexts. This can be built on in this thesis. Using a latent approach to construct values measures over time is a valid, even common, approach. However, the challenge will be to demonstrate that applying this approach cross-nationally is viable.

Operationalising Values

Implications of Methods Review

The analysis has highlighted that there is an extremely varied approach to operationalising political values in the empirical literature. Despite the relative consensus surrounding the definition of values, there are significant differences regarding the parts of value theories that are actually operationalised. The main difference is between those researchers who emphasise value conflict through ordering (for example Tetlock, 1986; Goren, 2005) and those who perceive values as non-ordered (for example Peffley, Knigge and Hurwitz, 2001). The latent approach to values measurement incorporates aspects of both, which is what makes it appropriate here. This study takes the position that values always involve competing priorities but not always competing preferences. In other words, the influence of a specific value on an individual's political preference does not preclude another value from also having an influence. While values may be in conflict to an extent, they can still have independent effects and their influence on decision-making is likely to depend on contextual circumstances. For example, an individual could be both a strong moral traditionalist and a strong egalitarian; but it is the context of political competition that will define which of these is more relevant to their political choice. These values will always be internally prioritised by that individual but the extent to which they are in conflict is defined by external factors, such as party positioning or the issue agenda.

The most common approach to values research in politics is to define values according to a specific political context (Alvarez and Brehm, 2002; Marietta and Barker, 2007). This is consistent with most values theories, although it does conflict with some of the arguments made by Schwartz: namely that values structures should be universal. It is at this point that this study clearly diverges from the Schwartz approach by focusing on explicitly political values. The theoretical reasons for this are sound. It can be argued that at different times and in different places certain political values will be more relevant to electoral competition. However, this does make cross-national comparison more difficult because it implies that the values themselves are contextually dependent and are therefore unique to each context. This is a balancing act. Despite the ubiquity of studies that use contextually dependent values measures these values are strikingly similar. They often vary through a degree of emphasis on one aspect of the value measure rather than another. For example, 'Moral Traditionalism' and 'Traditional Family Values' is ultimately a question of emphasis, not a fundamental difference, and this can be incorporated within a broad values typology. While there are challenges in developing viable comparable latent measures for the creation of a coherent political values structure that is robust and relevant to political division, this approach remains reasonable.

This does not mean that anything can be labelled a 'value' if you can justify the context. Some researchers have been broad in their definition of values and could be potentially accused of conflating the concept on occasion. The key is that values must remain in some sense abstract. To use a hypothetical British example that may be applicable to this study, it could be found that some measure of 'class loyalty' would be a relatively strong predictor of voting in the 1980s but have little or no effect in the 1990s or 2000s (Fieldhouse, 1995). It could be argued that in this instance class loyalty represented a 'value' that was being primed by the political rhetoric of the 1980s in a way that 'pro-life' values are primed by American politicians (Jacoby, 2006). Whether it represented a sufficiently abstract concept to define as a value that could be measured over time would depend on the type of indicators used. So, if it was measured by 'Attitudes to Trade Unions' then it does not represent a political value so much as a proxy for the salient political issues of the day. The measurement instrument is very important for avoiding conflation. Indicators themselves should be as far removed from the contemporary political context as possible if the aim is to establish a measure that has comparable cross-national validity. Constructing latent measures from attitudinal indicators is a reasonable approach but researchers must be aware of the extent to which those indicators themselves are primed by political context.

Distinguishing Values from Ideology and Attitudes

In order to distinguish values from ideologies and attitudes the following fundamental principles should be adhered to:

1. *Values measures should be distinguished by their abstract nature.* They represent trans-situational goals (Converse, 1964). They can be 'primed' by the political context, which defines those values that are likely to influence vote choice decisions. However, a values measure must be distinguished from an attitudinal measure as an underlying construct that is not defined by a single event or action. Values are distinguished from ideologies because they are not limited to the political sphere. They have a broader influence on individual preferences and behaviour and should therefore remain abstract and underlying.
2. *Values are distinguished from ideology because they are not based on a desire for a specific outcome but a set of general preferences.* While both represent underlying organisational constructs, ideology is represented in a clear set of identifiable political positions and attitudes. The parameters of values are not as clearly defined. It is therefore doubtful that latent measures are the most appropriate way to capture ideologies. Values, on the other hand, are fundamentally a latent concept due to their abstract nature.
3. *A single attitudinal indicator cannot fully represent a value.* Attitudes represent direct opinions towards key events and issues. They are far more volatile, and relevant attitudes are likely to change much more quickly than values as they are more susceptible to whim. They have no abstract component. Values act as organising principles for attitudes. Therefore it is valid to construct latent values dimensions from attitudinal measures, provided that there are multiple indicators that can tap into the underlying construct that constrains attitudes. However, that does not mean that any latent measure drawn from attitudes represents a 'value'. This is where it is important to make substantive assessments regarding the extent to which values are related to the political context, and to ensure that maintaining values as abstract organising constructs is held to as a fundamental principle.

Principles for the construction of latent values measures in cross-national research

1. *The value measure should represent the highest level of abstraction that it is possible to obtain from the available indicators.* This should apply even if that means compromising on the amount of variance accounted for in the measure. For example, it is not viable to create separate values measures for 'Freedom of Speech', 'Civil Liberties' and 'Equal Rights'. It may be debateable that these represent political value divisions in specific contexts, but they are unlikely to have much cross-national validity. However, it may be viable to use these indicators to create a broader values measure such as 'Equality' that would represent a more robust, abstract measure of an underlying values construct. Using the highest level of abstractions maximises the chances that the measure will be robust across multiple political contexts.
2. *Latent political values structures should be multi-dimensional in nature.* Values are a reflection of competing priorities – not of diametrically opposed positions. Empirical researchers attempting to model the relationship between values and political divisions should employ a partially deductive process, not a purely inductive one. When developing values measures it is important to model all possible underlying values patterns not just those the researcher believes represent existing political divisions. The inductive approach risks re-inventing the wheel and conflating values with political ideology. It is important to acknowledge that values are not just about binary political competition: they are also about differing priorities. This reflects recent findings suggesting that centre-right voters respond to a greater range of values than centre-left voters do and, more importantly, voters can be motivated by both positive and negative reactions to certain values (Westen, 2007; Haidt, 2012). Acknowledging the multi-dimensional nature of value division is vital to exploring these complexities.
3. *The cross-national validity of the values measures must be empirically established.* There is very little research that applies a latent values approach to cross-national research. Therefore, the overall viability of the findings depends on the study being able to establish robust values measures. It appears entirely viable to construct latent values measures using the European Value Survey. However, the fact that this has only been done before on a limited basis suggests there are some serious challenges to measuring cross-national values using this data. The next chapter deals with this challenge in detail.

4. *The indicators used to construct the value measures should be as far removed from the influence of political context as possible.* This is more of a guideline than an absolute principle, but it is important. In constructing latent measures of values, the researcher is already making a compromise by using attitudinal indicators to measure values. It is impossible to ignore the fact that the indicators themselves are liable to be influenced by the context from which they are derived. However, within those data limitations, it is still possible to identify more general attitudinal indicators from those that have overtly political connotations. This is clearly a subjective judgement, and to a degree relies on knowledge and discretion. But it is also important for developing robust latent measures for values in different political contexts.
5. *The value measures must be standardised and they must be benchmarked against each other.* In other words, they must represent comparable constructs in terms of the way in which they are measured. This is important for establishing their conceptual distinctiveness in cross-national and cross-sectional research. This is the main rationale for using a form of factor analysis to construct the values measures as opposed to indices. It represents a methodologically rigorous way of establishing the internal comparability of the values measures.

Conclusion

The aim of this chapter was to develop a set of principles that could be used to construct robust latent values measures in the empirical analysis. It defends this approach in the context of exploring how previous empirical research on political values has operationalised the concept of values. The chapter presented a methods review of values research; this showed mixed results from the point of view of this study. It highlighted that a latent approach to measuring political values is consistent with previous research: it is a relatively standard approach to operationalising values. However, these measures are generally defined by a single geographical context and make little attempt to establish generalisable validity beyond those specific contexts. This means that the study needs to ensure that the values measures it generates are sufficiently valid to demonstrate cross-national comparability. The analysis also demonstrated the wide variety of political values that researchers have captured and discussed issues related to conceptual clarity. Taking these two core lessons from the analysis the chapter then highlighted a series of principles that will be applied in the empirical stage of this study. In so doing, a methodological review of the political values measures was provided that compared approaches across different values research traditions, something that has been largely absent from the existing literature. It also sets out a justification for the use of latent measures of political values.

The particular challenge for political values researchers is balancing the need for developing measures that can explain political outcomes, with ensuring they remain conceptually robust. This is particularly important to a study that intends to measure values cross-nationally and over time. In the absence of ideal data, the most sensible approach is to apply multi-dimensional latent values structure derived from attitudinal questions. However, it remains as yet unclear from the foregoing analysis whether this is a valid approach. The next chapter will attempt to demonstrate empirically the validity of this approach by applying the above principles to developing latent values measures drawn from the European Values Survey.

Chapter 3 Constructing Latent Measures of Political Values

Introduction

The aim of this chapter is to assess whether there is a common set of multi-dimensional political values across the West European Electorate. Establishing these viable cross-national values measures is a critical stage for the model building strategy of the thesis. However, this chapter also attempts to make an external contribution by demonstrating the viability of a latent approach to measuring political values in a cross-national comparative context. There have been a number of attempts to categorise the political values of European electorates along a range of key dimensions (Van Deth and Scarbrough, 1995a; Knutsen and Kumlin, 2005). In previous cross-national analyses values dimensions have normally been expressed within uni-dimensional or bi-dimensional scales (for example, Left-Right, Libertarianism-Authoritarianism, Materialism-Postmaterialism)⁷. Work on developing multi-dimensional values measures for use in cross-national analysis has been a relatively recent development and largely confined to work in the Social Psychology tradition that focuses on underlying individual values more than political values (Schwartz, 1992; Caprara *et al.*, 2007). Studies taking a more multi-dimensional approach to studying core political values and voting have tended to be restricted to the analysis of a single context. This chapter is the starting point in attempting to contribute to this literature by identifying a viable latent political values structure that can be applied across the West European electorate thereby enabling cross-national comparison.

This analysis is the first empirical chapter of the thesis and the first stage of the model building process as *Figure 3.1* highlights. The main focus of the work presented here is the development of a Confirmatory Factor model (CFA), which aims to produce robust latent measures of core political values. This CFA measurement model will be used in the subsequent analysis to estimate the relationship between values and vote choice using full Structural Equation Models (SEM) (Baron and Kenny, 1986; Brown, 2006). The CFA model will be developed using data from the European Values Survey (EVS) and employed to assess the theory that there is a stable multi-dimensional value structure that is common across the West European Electorate.

⁷ Unidimensional or bi-dimensional in the sense that these are all encompassing dimensions that capture opposing positions on a single scale. That is, single scales or measures that run from Libertarian to Authoritarian, Materialist-Postmaterialist etc. This is in contrast to a multi-dimensional approach to values in which each value dimension is estimated using independent indicators.

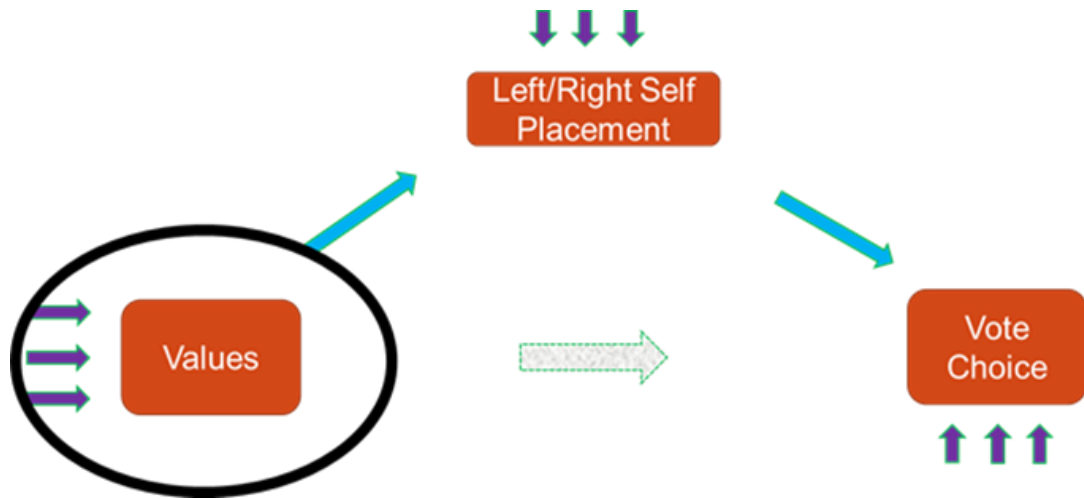


Figure 3.1 Highlighting chapter focus on values measurement

Figure 3.2 lists the five ideal principles for operationalising latent measures of political values introduced in the previous chapter. The analysis presented below has attempted to follow these principles using a confirmatory strategy based on prior empirical practice. While it was possible to identify these core principles from previous values papers, there are few examples of this approach being applied in cross-national analysis. Therefore, it should be stated that this chapter is not purely confirmatory. Firstly, it is applying a latent approach to measuring political values in a comparative context, for which there is little precedent in the literature. Secondly, in developing a multi-dimensional cross-national latent values structure using the EVS the analysis is breaking some new ground in the usage of these data (Van Deth and Scarbrough, 1995b). While the principles, and prior research, represent a solid guide to developing the model, this chapter ultimately takes a mixed approach. It is primarily a confirmatory approach but contains strong exploratory elements.

1. *The value measure should represent the highest level of abstraction that it is possible to obtain from the indicators while still being a substantively useful construct.*
2. *The Latent values structures should be essentially multi-dimensional in nature.*
3. *The cross-national validity of the values measures must be established empirically.*
4. *The indicators used to construct the value measures should be as far removed from contextual influences as is reasonably possible.*
5. *The value measures must be standardised and they must be benchmarked against each other.*

Figure 3.2 List of five principles for measuring latent values

Goren, Federico and Kittilson (2009) is a rare example of a paper that applies the latent approach to values in more than one political context, using panel data to measure the influence of party issue positioning on value change over three time points. Feldman (2003) used a similar strategy when measuring the influence of Authoritarianism on political preferences. However, in general the latent approach to measuring values has been confined to single n studies and in a single national context, normally the US (Alvarez and Brehm, 1995, 1997, 2002; Craig, Martinez and Kane, 2005). Heath, Evans and Martin (1994) is a relatively rare example of this latent confirmatory approach to measuring political values being applied in a European context, by developing scales for Authoritarianism and Libertarianism to be used in the UK. However, as far as can be ascertained, there are no examples of cross-national comparative political analysis that have used this latent values approach to political values. The comparative work that has been carried out uses more direct measures of individual values, such as the Schwartz Scale, or uni-dimensional proxy indicators (Pioro, Schwartz and Davidov, 2011; Raymond, 2011). Research using latent values has tended to focus attention on specific political values measures, such as Authoritarianism, rather than attempting to model a wider political values structure in the electorate (Jost *et al.*, 2003; Thorisdottir *et al.*, 2007). The aim here is to use the CFA to develop a more nuanced multi-dimensional latent values structure, capturing as wide a range of political values as the EVS data allows. The expectation is that this will provide a solid base measure with which to explore wider complexities in the structure of the relationship between political values and voting.

The chapter begins by outlining and justifying the main research questions that will be addressed with this analysis. The methodology and case selection section will lay out the overall research design and outlines the data that will be used in the analysis. The results of the measurement model process will then be presented. The first stage of the results will present descriptive data and explain the exploratory factor analysis that was used to build a viable confirmatory model. The second stage presents the CFA analysis. The CFA model used in this chapter was developed using pooled cross-national data of 15 countries from the 2008 wave of the EVS. It is then compared with the same model applied to the 1990 data using fitness indicators, loadings and factor scores. The results conclude with the presentation of Measurement Invariance (MI) tests using the Multi-group SEM approach. The MI test provides the strongest methodological assessment of a CFA measurement model's comparative qualities and quality of fit (Davidov, Schmitt and Billiet, 2011). This test confirms that the model generally fits the data well in all countries but there remains significant levels of variation between countries within each factor. The implications of this are then discussed in the concluding section.

It will be demonstrated that, despite certain data limitations, the EVS can be utilised to identify a five-dimensional political values structure: Traditionalism, Conformity, Authoritarianism, Individualism and Egalitarianism⁸. It will be argued that Configural Invariance in the measurement model has been established across the countries in the sample but the failure to establish more robust levels of measurement invariance to this point is indicative of subtle variation in the interpretation of political values between countries. This may require some caution when discussing the validity of further findings. However, it is argued that this variation can be considered a positive asset to the study as it highlights the benefits of a contextual approach to the values-voting relationship. The theoretical claims and empirical evidence for cross-cultural uniformity in political values structures are relatively weak, particularly regarding their strength in predicting political behaviour (Davidov, Schmitt and Billiet, 2011; Datler, Jagodzinski, and Schmidt, 2013; Welzel and Inglehart 2016). Values are formed and primed in specific socio-political contexts (Agnew, 1987). It may be more relevant for political researchers to look at variation in political values rather than the stability of individual values structures (Barnea and Schwartz, 1998). This approach is more likely to prove fruitful for studies focused on the influence of context.

Research Questions

1. Is there a common political values structure across the West European electorate?

The first research question assesses whether a multi-dimensional latent political values structure can be identified using the EVS. Existing values research utilising the EVS has tended to concentrate on one or two broad values measures (Knutsen, 1995a, 1995b). It has generally not been used to capture several values simultaneously.

Hypothesis 1 – *There is a common values structure across the West European Electorate.*

Hypothesis 2 – *The values structure of the West European Electorate will be constant at the 1990 and 2008 time points.*

⁸ However, it should be stated at this stage that the CFA measurement model itself only accounts for a 4 factor solution. Egalitarianism is captured by a single item indicator.

2. Does the political values structure vary between countries?

Question 2 measures the extent to which the values structure of the European Electorate varies between different countries. This defines whether the latent values measures are valid as a basis for cross-national comparison. As the 15 countries in the analysis are sufficiently similar in terms of political system, democratic stability and sample size, it is assumed that the basic values structure will show little variation between countries.

***Hypothesis 3** –The overall values structure will hold for each of the 15 countries in the analysis individually.*

***Hypothesis 4** –Any variation in the values structure will be clustered by country type.*

3. Does the values structure provide a robust measurement model for cross-national analysis?

Question 3 captures the key issue that this chapter addresses. It assesses whether the model is stable enough in different contexts to produce viable comparative findings. This has a substantial impact on the structure of the further analysis in the thesis. Prior research suggests that establishing full Measurement Invariance for the values structure will be unlikely (Davidov, Schmitt and Billiet, 2011; Welzel and Inglehart, 2016). It has been demonstrated that even the Schwartz values, which have been specifically designed and refined for universal application, do not always achieve ideal levels of Measurement Invariance (Datler, Jagodzinski and Schmidt, 2013; Aspelund, Lindeman and Verkasalo, 2013). Therefore it is likely to prove unrealistic for a partially exploratory approach to values measurement to achieve full Measurement Invariance. However, partial invariance may be sufficient for the purposes of this study as it is treating values as an independent variable in cross-national analysis and it is that external predictive quality that is of more importance (Welzel and Inglehart 2016). Demonstrating variability in values measures by context may therefore be of benefit to the broader contextual approach. As such, no hypotheses are attached to this question since the implications are open-ended.

Methodology and Case Selection

The analysis utilised data from the 2008 and 1990 waves of the EVS. The EVS is a large-scale repeated cross-national face-to-face survey that has had been collected in four separate waves over a 27-year period (1981, 1990, 1999 and 2008)⁹. The EVS is used in this analysis because it aims to capture changing attitudes and values within the European Population as a whole and to capture cross-national variation. It has the widest chronological reach of any comparable cross-national values survey series. The analysis focuses on the 2008 and 1990 waves because they represent the best basis for comparison with the widest range of potential values and countries. Most of the relevant question batteries for developing latent political values are asked in both 1990 and 2008. There is more significant variation in the questions asked or omitted in the 1981 and 1999 waves, which is why they are not included. Using the 1990 and 2008 waves captures an important 20-year period of political change in Western Europe and provides a sufficient range of different contexts to test for significant national levels of political variation. There are 15 West European countries that feature in both waves of this analysis. These countries are: Austria Belgium, Denmark, Finland, France, Germany (which is being treated as unified), Iceland, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden and the UK¹⁰. It should be stated that these countries have been selected due to convenience rather than on a substantive basis but represent (with the exception of Switzerland) a comprehensive range of West European Democracies with no major omissions.

Consideration was given to including Eastern European countries in this analysis, as this would clearly have been consistent with the focus of this study on variation by political context. The EVS includes data from 10 Eastern European countries that were involved in both the 1990 and 2008 survey waves.¹¹ However, previous findings suggest considerable variation in the interpretation of the meaning of left-right and of authoritarianism between East and West European electorates (Pioro, Schwartz and Davidov, 2011; Datler, Jagodzinski and Schmidt, 2013; Aspelund, Lindeman and Verkasalo, 2013). It is therefore likely that expanding the parameters of the study to include Eastern European data would have resulted in two separate measurement models – one for the East and one for the West. Findings from some initial exploratory work applying the CFA model to the Eastern European data provides some support for this – the CFA model developed in this Chapter clearly fits poorly to the East European Data especially compared with the West European subsamples that are

⁹ Data Citation; Integrated Values survey 1981-2008; Constructed from the EVS Longitudinal Data File 1981-2008. Citation link; <http://www.wvsevsdb.com/wvs/WVSIntegratedEVSconditions.jsp?Idioma=I>.

¹⁰ Malta was excluded due to insufficient sample size in the 1990 data.

¹¹ Excluding East Germany.

presented in the next chapter (*see Appendix 2*)¹². Developing alternative measurement models for Eastern and Western Europe would have been substantively interesting from the perspective of comparing contextual variation in the interpretation of political values. However, the primary focus of this study is to assess contextual variation in the relationship between values and voting. It is therefore critical to have consistency in the values measurement model in order for this to be achieved. The decision to exclude the Eastern European countries was taken to maximise comparability in the vote choice models that represent the primary focus for this analysis. Substantial variation in political culture, particularly regarding the meaning of left-right, would require an alternative research design that would render the differences between East and West Europe central to this study and change its core focus away from exploring the structure of the values-voting relationship. Case selection was therefore made on the basis of a least differences approach to the comparative analysis. Having a relatively homogenous set of West European country level cases allows for clearer interpretation when comparing the impact of macro-level political context introduced in future chapters.

The original aim of the analysis was to use an entirely confirmatory approach in order to maximise the chances of developing robust latent values measures. The intention was to use measures from previous research as a starting point and apply CFA models to establish their viability in the EVS sample. However, due to the paucity of cross-national research using latent values measures, a mixed approach is adopted incorporating both exploratory and confirmatory analysis. It was decided to work backwards to establish what the value structure for the 2008 pooled data was and then measure the extent to which that structure also applied in the 1990 wave. The initial stage concentrates on identifying the values structure using Exploratory Factor Analysis on key indicators. Once the basic factor structure is identified using EFA, a CFA measurement model is then fitted to the 2008 data. This necessitated the dropping of certain indicators in order to achieve parsimony and an acceptable model fit. Once a best fitting model for the 2008-pooled data was established the model was then applied to each country individually at both the 2008 and 1990 time-points. The CFA model will therefore be tested using both the 1990 and 2008 survey data at the pooled and single country level in order to establish both its cross-national and over-time stability. The analysis will also explore cross-national and over-time variation in the interpretation of the factors by developing and analysing factors scores for each latent values measure. The final stage of the analysis assesses the comparability of the values structure by using multi-group SEM analysis in order to test for Measurement Invariance.

¹² The model shows CFI and RMSEA figures that fall well short of acceptable fit levels at the pooled level – with a particularly poor performing Authoritarian factor,

The original CFA measurement models are developed using the pooled data from all 15 countries in the analysis. For the 2008 data this produces an overall n of 21021 and for the 1990 data the n is 22638. The CFA measurement model is then applied to each country on a single n basis and in a Multi-Group SEM model to test for cross-national variation and Measurement Invariance. The figures are recorded in detail in the results section but in 2008 the country level n ranged from 2075 (Germany) to 808 (Iceland). For 1990 the n ranged from 2791 (Belgium) to 588 (Finland).

All the models were run using the *Mplus* program and employing the WLSMV estimator to account for the inclusion of categorical indicators. A further advantage of using the WLSMV estimator is that it accounts for missing data in the observed variables by applying full information maximum likelihood calculations (Muthén and Muthén, 1998-2010). This provides a robust approach to the treatment of missing data in the analysis, particularly when taking into consideration cross-national variation in the levels of missing data (see *Chapter 6*).

Results

Exploratory Factor Analysis

The strategy for developing the measurement model mixed exploratory and confirmatory approaches. The CFA structure that is tested below was partially specified in reference to prior research using latent values dimensions. These measures are rooted in existing theory and empirical practice. However, there is no precedent for the EVS Data being used to construct exactly this form of latent values model cross-nationally. Variants of Traditionalism, Authoritarianism and Individualism measures have been constructed individually but not run in a single multi-factor model. The first stage of the analysis was therefore primarily inductive. It required using exploratory factor analysis in order to identify stable dimensions of political values measures that could be identified at both the 2008 and 1990 waves of the EVS.

This analysis was applied to the pooled data from the 15 countries at both time points. Specifically, the aim was to capture a broad range of dimensional value constraints from the range of attitudinal indicators contained within the EVS. Where possible these attitudinal indicators were selected on the basis of precedent – that they had been used to construct latent measures of political values in prior analysis identified in the previous chapter. This was relatively clear as regards values such as Authoritarianism, Individualism and Traditionalism. Identification of other value dimensions required taking more of an inductive approach. The EVS proved very useful for identifying measures of moral values and, arguably, for capturing tensions

between traditionalism and modernity. However, it proved less effective in identifying the more collective and existential values that were highlighted in the previous chapter. Most frustratingly from the point of view of the chronological period the study covers, there was a lack of indicators that could realistically operationalise the value of Security. Consistent with most values theorists Schwartz defines a preference for Security as 'safety, harmony, and stability of society, of relationships and of self' (Schwartz, Caprara and Vecchione, 2010, p.425). The EVS generally lacks indicators that can clearly capture this dimension directly. There are no questions that prompt a respondent to offer an opinion on the priority they assign to an aspect of personal security or that directly captures fear of existential threat. Some of these aspects are embedded in questions related to other topics (such as preferences for Democracy or attitudes to immigration) but it was not possible to draw these out into a recognisable Security dimension that was clearly independent of these other influences that were not distinctively values concepts. Early stages of the EFA analysis did identify a dimension related to attitudes towards Europe and Immigration but this could not be justifiably labelled as a political value of Security – it was clearly capturing preferences towards nationalism rather than any real response to existential threat. Therefore, regrettably, the EFA failed to identify a dimension that could be justifiably identified as Security according to previous research or logical judgement.

In addition to the problem with identifying a Security dimension, it was also necessary to drop the Benevolence/Altruism dimension as it was not possible to operationalise this at the 1990 time-point. The battery of attitudinal indicators capturing respondent preferences towards helping various vulnerable groups in society was only available in 2008¹³. As it is important for the scope of this study to consider the structure of the values-voting relationship across more than 1 time point it was decided to exclude this dimension. Finally, there was a lack of indicators for capturing the Egalitarianism dimension. This is problematic given the importance of Egalitarianism as a core political value in the literature. Therefore, in this instance, a compromise was made and Egalitarianism is entered into the analysis as a single item indicator capturing preferences towards income inequality. Clearly this is not adequate for fully operationalising Egalitarianism. However, it is a necessary compromise given the lack of a comprehensive question battery capturing the relative preferences of respondents for equality and the importance of this dimension to the analysis.

To develop the 'Traditionalism' and 'Conformity' measures the question battery related to societal taboos is used. These questions present the respondent with an activity or behaviour and then ask them to rank their attitudes on a 1-10 scale running from 'Never Justified' to 'Always Justified'. The Traditionalism indicators relate to:

¹³ Please see *Appendix 3*, for an early iteration of the EFA that included Benevolence and (speculative) Security indicators.

Homosexuality, Abortion, Divorce, Euthanasia and Suicide. Primarily, this measure represents Moral Traditionalism, some variation of which is captured using these indicators in a variety of studies (Alvarez and Brehm, 1995; McCann, 1997; Marietta and Barker, 2007; De Koster and van der Waal, 2007). The Conformity indicators relate to: claiming benefits to which you are not entitled, cheating on tax, joyriding, soft drug use, legal tax avoidance, and avoiding fares on public transport. These are clearly associated with rule and norm following.

The second key question battery referred to the Individualism questions. They are measured on 10-point Likert scales with the respondent given two opposing positions and asked to place themselves on a 10-point continuum. The scale runs from 1 (the most individualist position) to 10 (the least individualist position). The single indicator representing Egalitarianism (which is based on a 10-point question ascertaining the respondents support for equalising incomes) is also drawn from this question battery. It does not appear to be strongly correlated with the other individualism indicators.

The Authority measure was developed according to Dunn and Singh's (2011) approach. This demonstrates that Authority can be captured through variables related to desirable traits to be instilled in children. Respondents are given a list of traits and asked to state whether they think they are important to instil in children. These are coded as 1 = Mentioned 0 = Not Mentioned. The three items suggested by Dunn and Singh (2011), are based on Feldman's (2003) development of the Authority scale. These are Obedience, Imagination and Independence. This represents the one example of re-coding in the measurement model analysis. Obedience is reverse coded in order to create the differentiation between Authoritarian and Non-authoritarian attitudes to the raising of children.

Tables 3.1 and 3.2 present the descriptive statistics for each of these indicators for the pooled data at both the 2008 and 1990 waves. There are some anomalies that should be mentioned. Firstly, the relatively high amount of missing data on the TRAD1 (Homosexuality) indicator in 2008 can be explained by that question not being asked in the 2008 Italian survey. Likewise in 1990, the TRAD2 (Abortion) question was not asked in Denmark. The Individualism indicator IND4 (Freedom for firms v State interference) clearly stands out as having a disproportionate amount of missing data at both time points, but there is no clear pattern in the missing data for this variable.

Table 3.1 2008 descriptive data

CONTINUOUS VARIABLES		<i>Pooled n = 21021</i>							
		Valid	Missing	Mean	Median	SD	Min	Max	Range
CON1	False Benefits	20613	408	8.75	10	2.31	1	10	9
CON2	Cheating on Tax	20717	304	8.60	10	2.33	1	10	9
CON3	Joyriding	20818	203	9.49	10	1.57	1	10	9
CON4	Taking Soft Drugs	20703	318	8.66	10	2.40	1	10	9
CON5	Avoiding Tax	20466	555	7.32	8	2.88	1	10	9
CON6	Avoid Fare	20717	304	8.37	10	2.44	1	10	9
TRAD1	Homosexuality	18591	2430	3.95	4	4.05	1	10	9
TRAD2	Abortion	20411	610	5.51	6	3.30	1	10	9
TRAD8	Divorce	20432	589	4.44	4	2.94	1	10	9
TRAD9	Euthanasia	19926	1095	5.02	5	3.35	1	10	9
TRAD10	Suicide	19792	1229	7.30	9	3.31	1	10	9
IND1	Responsibility	20589	432	6.19	6	2.65	1	10	9
IND2	Unemployed Rights	20576	445	6.34	7	2.79	1	10	9
IND3	Competition	20375	646	6.61	7	2.59	1	10	9
IND4	Freedom v State	19801	1220	5.38	6	2.86	1	10	9
EG1	Equalise Incomes	20500	521	5.67	6	2.85	1	10	9

BINARY VARIABLES		Valid	Missing	% Yes	% No
AUTH3	Obedience	20491	530	25.13	74.87
AUTH5	Independence	20652	369	46.17	53.83
AUTH6	Imagination	20599	422	76.79	23.21

Table 3.2 1990 descriptive Data

CONTINUOUS VARIABLES		<i>Pooled n = 22638</i>							
		Valid	Missing	Mean	Median	SD	Min	Max	Range
CON1	False Benefits	22284	354	8.63	10	2.44	1	10	9
CON2	Cheating on Tax	22335	303	7.99	9	2.75	1	10	9
CON3	Joyriding	22464	174	9.59	10	1.41	1	10	9
CON4	Taking Soft Drugs	22451	187	9.36	10	1.79	1	10	9
CON5	Avoiding Tax	22232	406	7.62	9	2.96	1	10	9
CON6	Avoid Fare	22433	205	8.68	10	2.24	1	10	9
TRAD1	Homosexuality	21513	1125	6.60	7	3.60	1	10	9
TRAD2	Abortion	20993	1645	5.87	6	3.64	1	10	9
TRAD8	Divorce	21927	711	5.39	6	3.01	1	10	9
TRAD9	Euthanasia	21399	1239	6.21	6	3.47	1	10	9
TRAD10	Suicide	21491	1147	7.71	9	3.18	1	10	9
IND1	Responsibility	21878	760	6.07	6	3.02	1	10	9
IND2	Unemployed Rights	21927	711	6.30	7	3.09	1	10	9
IND3	Competition	21591	1047	6.87	8	2.89	1	10	9
IND4	Freedom v State	20774	1864	6.23	7	3.11	1	10	9
EG1	Equalise Incomes	22012	626	4.89	4	2.94	1	10	9

BINARY VARIABLES		Valid	Missing	% Yes	% No
AUTH3	Obedience	22555	83	34.64	65.36
AUTH5	Independence	22555	83	49.86	50.14
AUTH6	Imagination	22555	83	72.77	27.23

With the exception of the indicators related to Individualism the observed variables are generally skewed (*Appendix 4* and *Appendix 5* show the distributions). The Conformity indicators are strongly positively skewed, which is not surprising as these indicators are asking about morally dubious behaviour. The lack of variance within the Conformity indicators is somewhat problematic but the EFA Analysis below consistently identified Conformity as a separate factor. The Traditionalism indicators show a multinomial distribution, with answers clustering around the extremes and the middle values. The categorical Authoritarian indicators remain fairly consistently distributed between the time-points, though there is more missing data in the 2008 wave.

There is some limited evidence for the liberalising of attitudes on the Conformity and Traditionalism indicators. The means for the Conformity indicators move very slightly away from the 'Never Justified' end of the scale between 1990 and 2008, except for 'False benefits' and 'Cheating on tax'. This shift is much more in evidence for the Traditionalism indicators, where there is a significant decrease in the mean value on all indicators and the median decreases for all indicators apart from abortion. There is little evidence of any variation in the Individualism indicators.¹⁴

Tables 3.3 and 3.4 present the final results from the EFA analysis of the pooled data from the 2008 and 1990 waves of the EVS. The models were run in *Mplus* using a WLSMV estimator to take account of the non-normal nature of the data: this was a mixed model including both Continuous and Categorical factors. Varimax rotation was applied in order to achieve an optimal factor solution. The earlier stages of the EFA analysis used substantially more variables in an exploratory manner with the aim of identifying a parsimonious and substantively relevant model of values dimensions. The EFA was repeated with variables being progressively removed if they did not load onto an identifiable values dimension. The models shown here represent the final stage of the EFA process – these are the models that identified the final factor solution and the 5 values that are utilised by the CFA latent model presented below. Ultimately, the factor analysis process was successful because it identified the limits of the data before the Confirmatory stage and it also produced an additional values dimension that was not anticipated at the beginning of the analysis: Conformity. Originally the indicators making up the Conformity value were conceptualised as a component of the Traditionalism measure but it became clear very early in the EFA process that it was being identified as a separate factor in the analysis and that Conformity represented a distinct value dimension.

¹⁴ For full details of the question wording and scales, please see *Appendix 6*.

Table 3.3 2008 Final Exploratory Factor Analysis

	Factor 1 Tradition	Factor 2 Authority	Factor 3 Individualism	Factor 4 Conformity	Factor 5 Egalitarianism
<i>Eigenvalue</i>	4.878	3.76	2.223	2.053	1.683
<i>% of variance explained</i>	15.16	12.15	7.55	5.83	5.38
Homosexuality (TRAD1)	0.579				
Abortion (TRAD2)	0.763				
Divorce (TRAD8)	0.746				
Euthanasia (TRAD9)	0.680				
Suicide (TRAD10)	0.469				
Obedience (AUTH3)		-0.502			
Independence (AUTH5)		-0.538			
Imagination (AUTH6)		-0.393			
Responsibility (IND1)			0.556		
Take any job (IND2)			0.464		
Competition Good (IND3)			0.579		
Freedom (IND4)			0.529		
False Benefits (CON1)				0.537	
Cheating Tax (CON2)				0.653	
Joyriding (CON3)				0.524	
Soft Drug Use (CON4)				0.440	
Tax Avoidance (CON5)				0.472	
Avoiding Fare (CON6)				0.580	
Equal incomes (EGC1)					-0.338
<i>N</i>	21021				
<i>RMSEA</i>	0.024				

Table 3.4 1990 Final Exploratory Factor Analysis

	Factor 1 Tradition	Factor 2 Authority	Factor 3 Individualism	Factor 4 Conformity	Factor 5 Egalitarianism
Eigenvalue	3.8	2.02	1.61	1.21	1.01
% of variance explained	19.99	10.63	8.48	6.34	5.27
Homosexuality (TRAD1)	0.570				
Abortion (TRAD2)	0.596				
Divorce (TRAD8)	0.743				
Euthanasia (TRAD9)	0.575				
Suicide (TRAD10)	0.517				
Obedience (AUTH3)		-0.536			
Independence (AUTH5)		-0.572			
Imagination (AUTH6)		-0.424			
Responsibility (IND1)			0.547		
Take any job (IND2)			0.363		
Competition Good (IND3)			0.539		
Freedom (IND4)			0.578		
False Benefits (CON1)				0.533	
Cheating Tax (CON2)				0.619	
Joyriding (CON3)				0.346	
Soft Drug Use (CON4)				0.711	
Tax Avoidance (CON5)				0.481	
Avoiding Fare (CON6)				0.644	
Equal incomes (EGC1)					-0.274
N	22638				
RMSEA	0.03				

This final EFA model identifies an optimal 5 factor solution at both time points, with the eigenvalues of the first two factors (Traditionalism and Authoritarianism) representing double the amount of variance accounted for in the subsequent 3 factors. The order of the factors is also consistent across the two time-points. In both cases the single Egalitarian indicator represents a predictably weak, though still statistically distinct, fifth factor. Crucially, it does not significantly cross-load onto the Individualism factor. Therefore, while far from fully capturing the value of Egalitarianism, it can realistically be said to represent an alternative construct from Individualism. There is no other significant cross-loading, which is slightly surprising because it could be reasonably assumed that there would be a survey effect that resulted in cross-loading on the Traditionalism and Conformity indicators as they are drawn from the same question battery. This may be a function of applying Varimax rotation and can be further assessed in reference to the CFA model. Overall the strength of the loadings is respectable and they are consistent with loadings reported from EFA analysis of similar values indicators in previous studies (Feldman, 1988; Marietta and Barker, 2007). There are only 3 variables that are below the >.400 loading threshold and they are all over the threshold at the other time point (Field, 2013). The 'responsibility to take any job' indicator does not load as strongly onto Individualism as the other 2 indicators and the imagination indicator loads more

weakly onto Authority than the other indicators but neither of these are cause for fundamental concern. Overall the final model represents a balance between the exploratory and confirmatory aspects of this analysis. The value dimensions that were identified through the literature have performed as well as expected. However, the exploratory analysis was also able to identify data limitations in the EVS, highlighting necessary compromises and a parsimonious model.

The EFA findings therefore suggested that 5 political value dimensions could be identified in the EVS at the pooled level: Traditionalism, Conformity, Individualism, Egalitarianism and Authoritarianism. The indicators used for all of these measures are mainly consistent with previous research that captures these values as latent constructs. Four of these measures can be tested through the CFA measurement model, with Egalitarianism represented as a single item proxy indicator.

Pooled CFA model

Figure 3.3 shows the confirmatory model that was designed as a result of the EFA and the application of modification indices (*Appendix 7* provides an example of the *Mplus* code used to test this model). Several modifications were made to the basic EFA model when fitting the final CFA solution. The main amendments related to developing more parsimonious factors that produced a better fitting measurement model. The Conformity and Traditionalism dimensions were reduced to the 3 best performing indicators in terms of the strength of the factor loadings. The final Conformity indicators represent attitudes to drugs, avoiding tax and the willingness to skip paying a fare on public transport. The final Traditionalism indicators represent attitudes to homosexuality, abortion and divorce. In addition the 'take any job' indicator was dropped from the Individualism factor to develop comparably parsimonious measures and because it was a relatively poor performing indicator. The results of these final pooled CFA solutions are presented in *Table 3.5*, which highlights the factor loadings (standardised) and model fit statistics of the model at each time point when applied to the pooled data. Whilst not a perfect fit, the models are a good fit of the data at both the 2008 and 1990 time points. The RMSEA for both models is comfortably below <0.06 , and when combined with CFI figures of above 0.95 this suggests these models fit the data well and are a reasonable representation of the political value structure within the EVS. The *Chi* Square test is significant but that is to be expected with such a large sample size and is not considered problematic (Brown, 2006). The fact that the models exhibit similarity at both time points is also promising as regards the stability of the values measurement model. The similar fit statistics also suggest overall stability in the capacity of the model to represent the values structure overtime. The size of the factor loadings is similar across the two time points and there is no concern over the performance of any single item or factor in the model at the pooled level.

Figure 3.3 Final CFA model specification

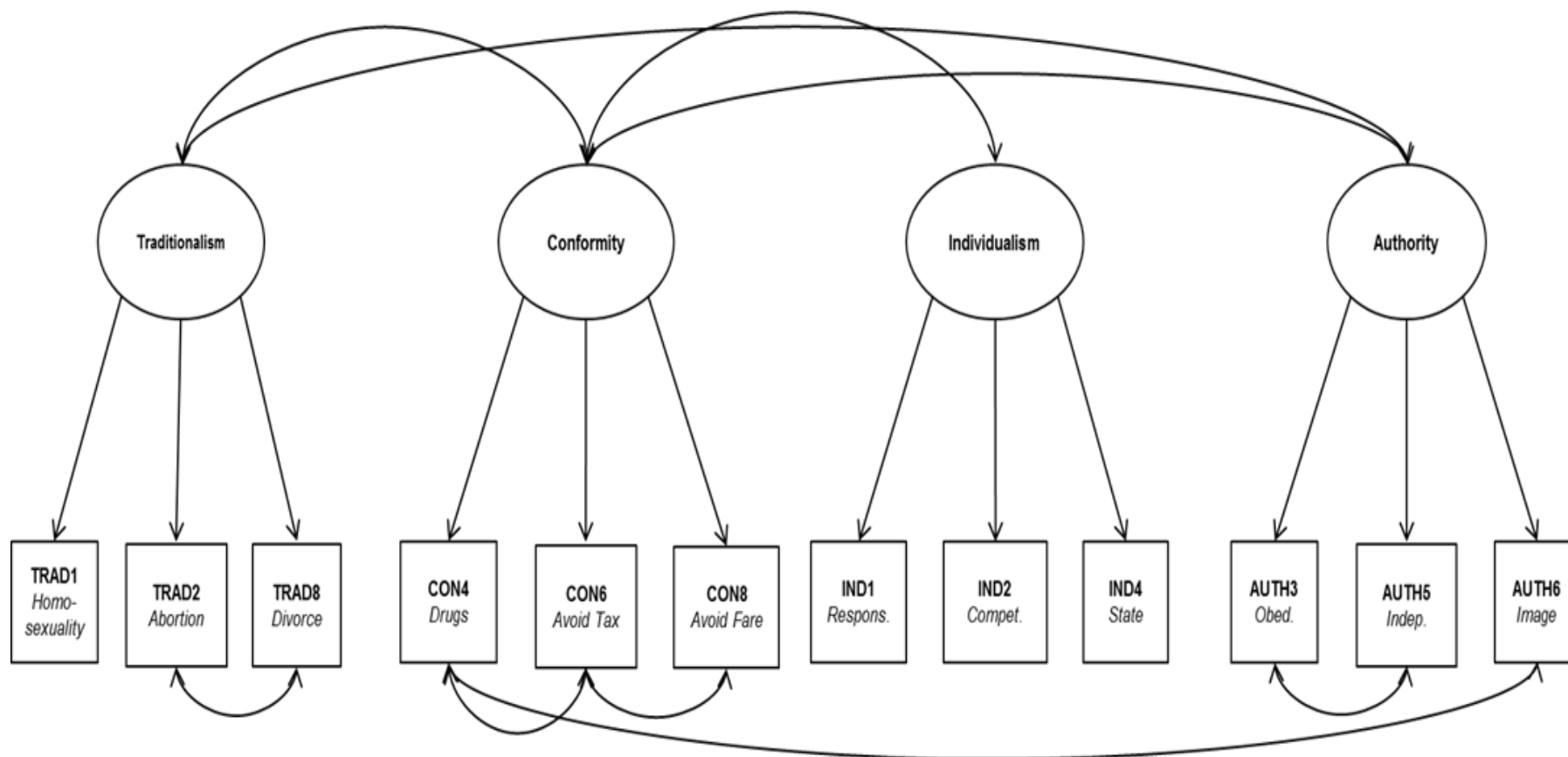


Table 3.5 Final CFA model on 2008 and 1990 pooled data

POOLED MODELS	2008	1990
<i>n</i>	21004	22631
<i>Traditionalism</i>		
TRAD1 Homosexuality	0.779 (0.008)	0.746 (0.007)
TRAD2 Abortion	0.734 (0.008)	0.608 (0.007)
TRAD8 Divorce	0.718 (0.008)	0.664 (0.007)
<i>Conformity</i>		
CON4 Soft Drugs	0.748 (0.012)	0.684 (0.010)
CON5 Avoid Tax	0.542 (0.016)	0.519 (0.013)
CON6 Avoid Fare	0.496 (0.009)	0.441 (0.008)
<i>Individualism</i>		
IND1 Responsibility	0.558 (0.007)	0.558 (0.008)
IND3 Competition	0.555 (0.007)	0.523 (0.008)
IND4 State vs. Freedom	0.579 (0.008)	0.596 (0.008)
<i>Authoritarianism</i>		
AUTH3 Obedience	0.473 (0.024)	0.418 (0.014)
AUTH5 Independence	0.539 (0.019)	0.545 (0.021)
AUTH6 Imagination	0.455 (0.018)	0.576 (0.018)
<i>Factor Correlations</i>		
CONF with TRAD	0.478 (0.010)	0.566 (0.010)
AUTH with TRAD	0.615 (0.023)	0.643 (0.019)
CONF with INDIV	0.073 (0.011)	0.220 (0.011)
CONF with AUTH	0.268 (0.018)	0.333 (0.017)
<i>Modifications</i>		
AUTH3 with AUTH5	0.228 (0.022)	0.161 (0.017)
AUTH5 with AUTH6	-0.079 (0.027)	-0.064 (0.030)
AUTH6 with CON4	0.217 (0.015)	0.145 (0.013)
TRAD8 with TRAD2	0.281 (0.014)	0.405 (0.008)
CON6 with CON5	0.153 (0.011)	0.127 (0.009)
CON5 with CON4	-0.277 (0.030)	-0.152 (0.019)
<i>Fit Statistics</i>		
χ^2	15099.483	710.381
<i>df</i>	30	27
CFI	0.969	0.962
TLI	0.963	0.957
RMSEA	0.03	0.03

Note: Standardised loadings and correlations reported.

Figures in **bold** significant at the $p < 0.005$ level.

This model shows sufficient evidence of a common factor structure when applied to the pooled European data at more than one time point in the EVS. The strength of the model fits suggest that there is evidence for this factor structure applying across the European electorate. The model is sufficiently robust to proceed to use it on a single n cross-national basis in order to test the comparative potential of the model.

Individual country CFA models

Tables 3.6 and 3.7 show the CFA model applied to each of the 15 countries in the analysis individually (see Appendix 8 for details of the descriptive data for each country at both time-points). There are a few necessary deviations from the base CFA model specified above. There were a number of examples of models not reaching convergence when the residuals in the Authority indicators were freely estimated – in which case they were constrained in order to identify the factor model. Additionally there are data limitation issues with some of these cases. In 2008 TRAD1 (Homosexuality) was not estimated in the Traditionalism factor for the Italian model because the question was not asked. There is a similar issue with the 1990 Danish model, where the question relating to TRAD2 (Abortion) was not asked. AUTH6 is not estimated in the Authority factor in the Irish model because when included the model did not achieve convergence. In the 1990 data, AUTH3 (Obedience) fails to achieve significance in the French model. The only major problem is with the Icelandic model in 1990, which failed to achieve convergence with the inclusion of the Authoritarianism indicators.

The first observation to make is that in general the CFA model appears to be an adequate to good model fit for each of the individual countries. However, there are a few exceptions. Firstly, Denmark in 1990 is a relatively poor fitting model with a mediocre RMSEA of 0.063 and a CFI of 0.883. There are obvious issues of data quality that may explain this and it is worth noting that the model is a good fit for the Danish data in 2008 (RMSEA 0.034, CFI 0.958). Secondly, Spain is the only country where the model does not appear to fit the data particularly well at either time point (1990, RMSEA 0.051, CFI 0.889; 2008, RMSEA 0.069, CFI 0.805). The finding for 2008 is more problematic than for 1990, which is on the cusp of an acceptable fit. There is no clear reason why the model is a relatively poor fit for Spain. The factor loading for the Obedience indicator on Authority is relatively low in 1990 (0.250) and there are a few underperforming Individualism indicators but no single factor is obviously weak. The 1990 data does not offer any further evidence to explain this. The only other underperforming model fit is Germany in 2008 (RMSEA 0.063, CFI 0.871). Again, there are no clear weak factors in the model and only one underperforming indicator: Imagination on Authority (0.290). Like Denmark, the model fits the German data well at the other time-point. In 1990 the German model has RMSEA 0.037 and CFI 0.963. If $CFI < 0.90$ and $RMSEA < 0.06$ are used as the cut off point for assessing the acceptability of the models, then out of the 30 different national context models only 4 fail to meet the fit thresholds and all of these are on

the borderline of acceptability¹⁵. Spain is the only country that has relatively poor fit statistics at both time points. This relative cross-national stability is evidence that the model does have validity in capturing the underlying value structures of electorates and is not just capturing a value structure for a specific sample at a specific point in time. Given the substantive aims of the study to investigate the influence of political context it is relevant to try to retain as much data as possible. Therefore, even examples where countries slipped marginally below the standard thresholds for fit statistics have been retained in the analysis. This is consistent with a substantively research driven approach to assessing the quality of CFA fits that is recommended in the literature (Brown, 2006).

¹⁵ This is a strongly disputed area in the CFA methods literature (see discussions in Brown, 2006; Davidov *et al.*, 2011). The cut-offs mentioned above are relatively liberal but commonly used. However, many scholars argue that it is not the strict statistical cut-off points that matters for the interpretation of CFA but how the fit statistics relate to the substantive context of the study (Davidov *et al.*, 2011). In the context of a cross-national, over time study with 30 separate models the fits here are good.

Table 3.6 2008 CFA models by individual country

2008 Models n	Austria 1510		Belgium 1509		Denmark 1507		Finland 1134		France 1500		Germany 2075		Iceland 808		Italy 1518	
<i>Traditionalism</i>																
TRAD1 Homosexuality	0.810	(0.022)	0.701	(0.030)	0.789	(0.034)	0.745	(0.037)	0.774	(0.028)	0.709	(0.026)	0.612	(0.046)	N/A	
TRAD2 Abortion	0.631	(0.024)	0.591	(0.031)	0.646	(0.031)	0.765	(0.040)	0.740	(0.028)	0.782	(0.029)	0.672	(0.052)	0.846	(0.024)
TRAD8 Divorce	0.701	(0.021)	0.565	(0.031)	0.597	(0.034)	0.783	(0.036)	0.729	(0.027)	0.776	(0.029)	0.591	(0.048)	0.846	(0.023)
<i>Conformity</i>																
CON4 Soft Drugs	0.779	(0.028)	0.835	(0.101)	0.870	(0.076)	0.726	(0.069)	0.800	(0.047)	0.798	(0.041)	0.777	(0.104)	0.912	(0.050)
CON5 Avoid Tax	0.644	(0.043)	0.601	(0.089)	0.266	(0.070)	0.298	(0.065)	0.537	(0.064)	0.538	(0.050)	0.424	(0.098)	0.357	(0.046)
CON6 Avoid Fare	0.676	(0.027)	0.278	(0.040)	0.433	(0.040)	0.396	(0.044)	0.520	(0.035)	0.546	(0.030)	0.313	(0.050)	0.379	(0.028)
<i>Individualism</i>																
IND1 Responsibility	0.564	(0.028)	0.349	(0.044)	0.622	(0.032)	0.504	(0.026)	0.452	(0.031)	0.647	(0.023)	0.593	(0.049)	0.430	(0.039)
IND3 Competition	0.590	(0.028)	0.268	(0.037)	0.419	(0.025)	0.681	(0.027)	0.576	(0.033)	0.514	(0.021)	0.454	(0.043)	0.482	(0.042)
IND4 State vs. Freedom	0.642	(0.030)	0.700	(0.082)	0.618	(0.032)	0.724	(0.026)	0.518	(0.032)	0.651	(0.024)	0.539	(0.044)	0.435	(0.040)
<i>Authoritarianism</i>																
AUTH3 Obedience	0.474	(0.062)	0.541	(0.069)	0.590	(0.064)	0.576	(0.069)	0.607	(0.065)	0.628	(0.111)	0.303	(0.096)	0.230	(0.054)
AUTH5 Independence	0.571	(0.082)	0.696	(0.109)	0.367	(0.082)	0.477	(0.088)	0.827	(0.115)	0.598	(0.121)	0.679	(0.257)	0.534	(0.066)
AUTH6 Imagination	0.725	(0.084)	0.588	(0.073)	0.578	(0.066)	0.581	(0.077)	0.626	(0.074)	0.290	(0.058)	0.925	(0.304)	0.455	(0.063)
<i>Factor Correlations</i>																
CONF with TRAD	0.605	(0.027)	0.437	(0.058)	0.405	(0.048)	0.466	(0.053)	0.417	(0.036)	0.417	(0.029)	0.429	(0.068)	0.512	(0.035)
AUTH with TRAD	0.667	(0.074)	0.491	(0.062)	0.553	(0.062)	0.575	(0.066)	0.431	(0.052)	0.511	(0.092)	0.357	(0.122)	0.492	(0.061)
CONF with INDIV	0.239	(0.033)	-0.074	(0.038)	0.090	(0.041)	-0.079	(0.049)	0.080	(0.042)	-0.113	(0.031)	0.162	(0.058)	0.074	(0.049)
CONF with AUTH	0.234	(0.048)	0.239	(0.054)	0.272	(0.067)	0.179	(0.082)	0.259	(0.048)	0.165	(0.059)	0.269	(0.115)	0.455	(0.072)
<i>Modifications</i>																
AUTH3 with AUTH5	0.129	(0.097)	-0.015	(0.159)	0.370	(0.076)	0.213	(0.100)	-0.173	(0.284)	0.152	(0.191)	0.111	(0.138)	N/A	
AUTH5 with AUTH6	-0.300	(0.215)	-0.515	(0.236)	-0.301	(0.096)	-0.463	(0.133)	-0.742	(0.452)	-0.266	(0.104)	-0.991	(5.687)	N/A	
AUTH6 with CON4	0.327	(0.081)	0.343	(0.117)	0.320	(0.119)	0.184	(0.085)	0.222	(0.069)	0.391	(0.055)	0.228	(0.473)	-0.023	(0.104)
TRAD8 with TRAD2	0.295	(0.032)	0.153	(0.036)	0.399	(0.033)	0.347	(0.078)	0.321	(0.050)	0.076	(0.088)	0.197	(0.073)	N/A	
CON6 with CON5	0.029	(0.062)	0.125	(0.038)	0.124	(0.038)	0.429	(0.029)	0.144	(0.046)	0.184	(0.036)	0.078	(0.045)	0.328	(0.022)
CON5 with CON4	-0.519	(0.096)	-0.853	(0.538)	-0.108	(0.155)	0.018	(0.069)	-0.457	(0.156)	-0.328	(0.113)	-0.158	(0.197)	-0.145	(0.137)
<i>Fit Statistics</i>																
χ^2	1052.106		105.915		73.352		67.379		81.984		230.93		48.189		58.976	
df	21		31		27		21		24		25		30		26	
CFI	0.909		0.929		0.958		0.94		0.947		0.871		0.964		0.962	
TLI	0.909		0.91		0.945		0.917		0.936		0.85		0.954		0.956	
RMSEA	0.054		0.04		0.034		0.044		0.04		0.063		0.027		0.029	

Note: Standardised loadings and correlations reported. Figures in **bold** significant at the $p < 0.005$ level.

Table 3.6 2008 CFA models by individual country (*continued*)

2008 Models <i>n</i>	Ireland <i>1013</i>	Netherlands <i>1554</i>	Norway <i>1090</i>	Portugal <i>1553</i>	Spain <i>1500</i>	Sweden <i>1187</i>	UK <i>1561</i>
Traditionalism							
TRAD1 Homosexuality	0.592 (0.050)	0.754 (0.022)	0.798 (0.041)	0.868 (0.049)	0.796 (0.024)	0.918 (0.045)	0.776 (0.026)
TRAD2 Abortion	0.698 (0.059)	0.779 (0.025)	0.640 (0.038)	0.578 (0.035)	0.836 (0.026)	0.674 (0.037)	0.724 (0.026)
TRAD8 Divorce	0.607 (0.054)	0.796 (0.022)	0.653 (0.037)	0.500 (0.037)	0.736 (0.027)	0.654 (0.035)	0.703 (0.025)
Conformity							
CON4 Soft Drugs	0.812 (0.122)	0.724 (0.036)	0.720 (0.059)	0.656 (0.035)	0.795 (0.027)	0.414 (0.033)	0.728 (0.033)
CON5 Avoid Tax	0.455 (0.108)	0.361 (0.040)	0.407 (0.069)	0.617 (0.056)	0.561 (0.040)	0.483 (0.036)	0.509 (0.040)
CON6 Avoid Fare	0.300 (0.053)	0.433 (0.027)	0.476 (0.043)	0.754 (0.039)	0.601 (0.025)	0.938 (0.058)	0.478 (0.028)
Individualism							
IND1 Responsibility	0.593 (0.049)	0.535 (0.029)	0.469 (0.029)	0.605 (0.033)	0.367 (0.037)	0.711 (0.018)	0.634 (0.024)
IND3 Competition	0.453 (0.043)	0.545 (0.030)	0.610 (0.031)	0.432 (0.029)	0.606 (0.048)	0.737 (0.017)	0.690 (0.024)
IND4 State vs. Freedom	0.540 (0.044)	0.510 (0.029)	0.603 (0.033)	0.553 (0.032)	0.395 (0.036)	0.714 (0.019)	0.526 (0.023)
Authoritarianism							
AUTH3 Obedience	0.358 (0.118)	0.506 (0.049)	0.747 (0.090)	0.627 (0.088)	0.250 (0.047)	0.348 (0.151)	0.475 (0.071)
AUTH5 Independence	0.792 (0.226)	0.456 (0.048)	0.463 (0.122)	0.683 (0.096)	0.801 (0.069)	0.232 (0.105)	0.302 (0.057)
AUTH6 Imagination	N/A	0.502 (0.046)	0.517 (0.064)	0.153 (0.094)	0.461 (0.054)	0.181 (0.087)	0.243 (0.064)
Factor Correlations							
CONF with TRAD	0.407 (0.071)	0.623 (0.037)	0.462 (0.044)	0.396 (0.033)	0.619 (0.030)	0.117 (0.038)	0.620 (0.034)
AUTH with TRAD	0.311 (0.103)	0.808 (0.064)	0.499 (0.062)	0.186 (0.050)	0.442 (0.047)	0.814 (0.139)	0.536 (0.081)
CONF with INDIV	0.155 (0.057)	-0.061 (0.043)	0.032 (0.050)	0.139 (0.040)	0.343 (0.044)	0.003 (0.057)	0.126 (0.039)
CONF with AUTH	0.203 (0.096)	0.620 (0.070)	0.229 (0.066)	0.255 (0.044)	0.451 (0.049)	0.045 (0.025)	0.434 (0.085)
Modifications							
AUTH3 with AUTH5	N/A	0.384	0.052	0.170 (0.181)	0.462 (0.052)	N/A	0.333 (0.071)
AUTH5 with AUTH6	N/A	N/A	-0.335 (0.121)	0.040 (0.068)	N/A	0.166 (0.054)	0.108 (0.050)
AUTH6 with CON4	N/A	0.196 (0.052)	0.107 (0.068)	0.124 (0.044)	N/A	0.262 (0.077)	0.103 (0.044)
TRAD8 with TRAD2	0.160 (0.094)	0.128 (0.062)	0.339 (0.047)	0.420 (0.032)	-0.006 (0.076)	0.213 (0.303)	0.254 (0.042)
CON6 with CON5	0.075 (0.046)	0.173 (0.029)	0.171 (0.042)	0.239 (0.080)	0.162 (0.037)	N/A	0.158 (0.030)
CON5 with CON4	-0.250 (0.297)	-0.188 (0.056)	-0.019 (0.089)	-0.024 (0.059)	-0.162 (0.070)	N/A	-0.064 (0.064)
Fit Statistics							
χ^2	42.583	1395.513	95.147	77.339	970.791	77.102	105.707
<i>df</i>	25	27	26	27	23	21	25
CFI	0.962	0.961	0.923	0.957	0.805	0.925	0.93
TLI	0.949	0.956	0.901	0.95	0.828	0.9	0.921
RMSEA	0.03	0.038	0.049	0.035	0.069	0.047	0.045

Note: Standardised loadings and correlations reported. Figures in **bold** significant at the $p < 0.005$ level.

Table 3.7 1990 CFA models by individual country

1990 Models n	Austria 1460	Belgium 2792	Denmark 1030	Finland 588	France 1002	Germany 3437	Iceland 702	Italy 2018
<i>Traditionalism</i>								
TRAD1 Homosexuality	0.767 (0.023)	0.742 (0.020)	0.800 (0.042)	0.673 (0.059)	0.822 (0.032)	0.733 (0.017)	0.604	0.769 (0.024)
TRAD2 Abortion	0.625 (0.025)	0.573 (0.021)	N/A	0.682 (0.061)	0.637 (0.029)	0.560 (0.017)	0.556	0.576 (0.024)
TRAD8 Divorce	0.667 (0.025)	0.682 (0.018)	0.634 (0.034)	0.599 (0.061)	0.630 (0.029)	0.658 (0.016)	0.552	0.671 (0.021)
<i>Conformity</i>								
CON4 Soft Drugs	0.657 (0.026)	0.653 (0.025)	0.783 (0.061)	0.667 (0.086)	0.645 (0.035)	0.614 (0.016)	0.677	0.785 (0.038)
CON5 Avoid Tax	0.515 (0.035)	0.657 (0.039)	0.342 (0.063)	0.564 (0.124)	0.702 (0.050)	0.664 (0.030)	0.212	0.540 (0.044)
CON6 Avoid Fare	0.533 (0.025)	0.515 (0.022)	0.380 (0.037)	0.547 (0.075)	0.549 (0.033)	0.720 (0.019)	N/A	0.397 (0.025)
<i>Individualism</i>								
IND1 Responsibility	0.478 (0.028)	0.534 (0.022)	0.639 (0.032)	0.481 (0.036)	0.588 (0.033)	0.511 (0.021)	0.514	0.481 (0.030)
IND3 Competition	0.465 (0.027)	0.596 (0.022)	0.415 (0.031)	0.536 (0.038)	0.526 (0.031)	0.498 (0.020)	0.579	0.524 (0.032)
IND4 State vs. Freedom	0.704 (0.033)	0.548 (0.022)	0.712 (0.033)	0.832 (0.045)	0.623 (0.033)	0.617 (0.023)	0.642	0.520 (0.032)
<i>Authoritarianism</i>								
AUTH3 Obedience	0.410 (0.063)	0.394 (0.044)	0.587 (0.053)	0.417 (0.097)	0.076 (0.070)	0.522 (0.033)	N/A	0.483 (0.050)
AUTH5 Independence	0.369 (0.062)	0.732 (0.086)	0.393 (0.081)	0.465 (0.121)	0.710 (0.075)	0.432 (0.036)	N/A	0.694 (0.081)
AUTH6 Imagination	0.411 (0.067)	0.664 (0.068)	0.696 (0.063)	0.510 (0.114)	0.517 (0.062)	0.506 (0.035)	N/A	0.585 (0.064)
<i>Factor Correlations</i>								
CONF with TRAD	0.668 (0.029)	0.580 (0.025)	0.450 (0.050)	0.413 (0.072)	0.652 (0.034)	0.649 (0.021)	0.551	0.580 (0.035)
AUTH with TRAD	0.938 (0.135)	0.454 (0.049)	0.644 (0.063)	0.682 (0.138)	0.521 (0.066)	0.952 (0.055)	N/A	0.569 (0.058)
CONF with INDIV	0.051 (0.046)	0.081 (0.030)	0.547 (0.087)	-0.010 (0.049)	0.119 (0.045)	0.229 (0.025)	0.156	0.236 (0.037)
CONF with AUTH	0.801 (0.130)	0.360 (0.046)	0.282 (0.045)	0.428 (0.129)	0.553 (0.066)	0.577 (0.047)	N/A	0.396 (0.056)
<i>Modifications</i>								
AUTH3 with AUTH5	0.183 (0.058)	0.092 (0.081)	0.380 (0.076)	0.208 (0.106)	0.014 (0.086)	0.197 (0.042)	N/A	0.050 (0.099)
AUTH5 with AUTH6	0.201 (0.064)	-0.547 (0.019)	-0.058 (0.108)	0.068 (0.130)	N/A	0.006 (0.048)	0.575	-0.267 (0.173)
AUTH6 with CON4	0.008 (0.044)	0.126 (0.040)	0.109 (0.101)	0.094 (0.088)	0.108 (0.054)	0.085 (0.023)	-0.056	0.115 (0.053)
TRAD8 with TRAD2	0.316 (0.031)	0.436 (0.020)	N/A	0.494 (0.055)	0.486 (0.025)	0.357 (0.017)	0.266	0.527 (0.019)
CON6 with CON5	0.232 (0.024)	-0.030 (0.042)	0.214 (0.027)	0.113 (0.110)	-0.001 (0.060)	-0.101 (0.058)	N/A	0.103 (0.029)
CON5 with CON4	0.025 (0.038)	-0.387 (0.071)	0.124 (0.079)	-0.103 (0.149)	-0.206 (0.089)	-0.241 (0.040)	N/A	-0.324 (0.109)
<i>Fit Statistics</i>								
χ^2	68.907	114.607	117.596	56.293	31.837	142.911	43.349	137.704
df	24	27	23	24	24	25	22	27
CFI	0.971	0.957	0.883	0.927	0.991	0.963	0.95	0.924
TLI	0.969	0.954	0.872	0.909	0.989	0.962	0.931	0.921
RMSEA	0.036	0.034	0.063	0.048	0.018	0.037	0.037	0.045

Note: Standardised loadings and correlations reported. Figures in **bold** significant at the $p < 0.005$ level.

Table 3.7 1990 CFA models by individual country (continued)

1990 Models n	Ireland 1000	Netherlands 1017	Norway 1239	Portugal 1185	Spain 2637	Sweden 1047	UK 1484
<i>Traditionalism</i>							
TRAD1 Homosexuality	0.711 (0.030)	0.571 (0.030)	0.810 (0.043)	0.572 (0.035)	0.808 (0.018)	0.749 (0.042)	0.763 (0.030)
TRAD2 Abortion	0.496 (0.033)	0.736 (0.030)	0.540 (0.035)	0.504 (0.039)	0.734 (0.019)	0.544 (0.039)	0.506 (0.027)
TRAD8 Divorce	0.652 (0.032)	0.794 (0.029)	0.561 (0.033)	0.615 (0.038)	0.702 (0.021)	0.627 (0.036)	0.550 (0.027)
<i>Conformity</i>							
CON4 Soft Drugs	0.582 (0.046)	0.766 (0.035)	0.542 (0.043)	0.672 (0.107)	0.761 (0.032)	0.417 (0.063)	0.667 (0.048)
CON5 Avoid Tax	0.399 (0.046)	0.414 (0.045)	0.475 (0.057)	0.635 (0.121)	0.689 (0.046)	0.553 (0.102)	0.465 (0.043)
CON6 Avoid Fare	0.399 (0.046)	0.571 (0.030)	0.442 (0.038)	0.211 (0.043)	0.461 (0.024)	0.401 (0.061)	0.328 (0.030)
<i>Individualism</i>							
IND1 Responsibility	0.550 (0.035)	0.560 (0.060)	0.571 (0.037)	0.434 (0.040)	0.486 (0.033)	0.604 (0.027)	0.614 (0.027)
IND3 Competition	0.644 (0.040)	0.273 (0.037)	0.474 (0.033)	0.346 (0.037)	0.344 (0.028)	0.609 (0.026)	0.640 (0.028)
IND4 State vs. Freedom	0.484 (0.035)	0.534 (0.056)	0.485 (0.033)	0.699 (0.059)	0.595 (0.039)	0.646 (0.026)	0.555 (0.026)
<i>Authoritarianism</i>							
AUTH3 Obedience	0.337 (0.058)	0.599 (0.050)	0.545 (0.049)	0.565 (0.080)	0.436 (0.043)	0.640 (0.085)	0.426 (0.058)
AUTH5 Independence	0.584 (0.103)	0.694 (0.067)	0.432 (0.089)	0.886 (0.154)	0.734 (0.046)	0.588 (0.099)	0.564 (0.104)
AUTH6 Imagination	0.771 (0.117)	0.769 (0.061)	0.729 (0.063)	0.616 (0.090)	0.517 (0.034)	0.401 (0.063)	0.670 (0.096)
<i>Factor Correlations</i>							
CONF with TRAD	0.788 (0.070)	0.635 (0.037)	0.507 (0.043)	0.528 (0.090)	0.493 (0.026)	0.424 (0.063)	0.673 (0.049)
AUTH with TRAD	0.638 (0.097)	0.654 (0.051)	0.641 (0.058)	0.439 (0.067)	0.487 (0.034)	0.653 (0.086)	0.464 (0.064)
CONF with INDIV	0.226 (0.063)	0.201 (0.058)	0.197 (0.053)	0.093 (0.048)	0.153 (0.032)	0.014 (0.054)	0.173 (0.045)
CONF with AUTH	0.581 (0.118)	0.562 (0.059)	0.334 (0.072)	0.237 (0.068)	0.383 (0.036)	0.249 (0.081)	0.361 (0.074)
<i>Modifications</i>							
AUTH3 with AUTH5	0.101 (0.080)	0.128 (0.108)	0.197 (0.080)	-0.248 (0.476)	0.112 (0.072)	0.012 (0.162)	0.181 (0.078)
AUTH5 with AUTH6	-0.325 (0.354)	-0.572 (0.238)	-0.223 (0.154)	-0.922 (0.893)	N/A	-0.150 (0.162)	-0.463 (0.233)
AUTH6 with CON4	0.049 (0.077)	0.127 (0.082)	0.142 (0.068)	0.086 (0.065)	0.081 (0.043)	0.086 (0.042)	0.090 (0.062)
TRAD8 with TRAD2	0.231 (0.038)	0.210 (0.068)	0.420 (0.028)	0.369 (0.036)	0.363 (0.028)	0.452 (0.033)	0.439 (0.022)
CON6 with CON5	0.296 (0.022)	0.211 (0.033)	0.192 (0.034)	-0.005 (0.048)	-0.146 (0.047)	0.105 (0.065)	0.236 (0.021)
CON5 with CON4	0.094 (0.040)	0.081 (0.054)	0.056 (0.048)	-0.284 (0.310)	-0.640 (0.153)	0.022 (0.071)	0.071 (0.058)
<i>Fit Statistics</i>							
χ^2	845.143	67.812	110.292	58.365	232.006	69.421	51.587
df	30	22	27	30	30	24	26
CFI	0.962	0.952	0.92	0.961	0.889	0.943	0.979
TLI	0.958	0.948	0.906	0.951	0.904	0.921	0.974
RMSEA	0.034	0.045	0.05	0.028	0.051	0.043	0.026

Note: Standardised loadings and correlations reported. Figures in **bold** significant at the $p < 0.005$ level.

As with the pooled data, the strength of the factor loadings (standardised) are adequate rather than outstanding, with a few exceptions. There is no country that stands out as an outlier in having particularly low or particularly high loadings. However, there are some individual examples that raise concern and which are likely to impact on the overall comparability of the measurement model. Most of the issues are with the factor for Authoritarianism. The strength of the loadings on the Authoritarianism factor in 2008 is particularly weak in a number of countries with 11 examples of Authoritarianism indicators having loadings under the, more generous, threshold point for acceptability of <0.400 . Loadings are particularly weak for Sweden and the UK although there is no evidence of a country level issue because the loadings for all indicators are acceptable in 1990. In general, 1990 as a whole is less problematic with only 4 examples of loadings below 0.400 for Authoritarianism, although obedience on Authoritarianism in France (0.076) is the only example in any of the models of a non-significant loading. While the strength of the loadings on the 2008 Authoritarian factor appears to vary considerably between countries for each indicator, it is only for Sweden and the UK that all loadings are below an acceptable strength and Iceland in 1990, where the Authority indicators proved problematic for model convergence. Prior research does suggest that relatively weak construct validity is often demonstrated for these measures of Authoritarianism (Dunn and Singh, 2011). The measure is retained in the analysis because of its substantive significance.

The other factors appear to remain relatively consistent between countries and conform to the findings of the model from the pooled data. There are a few isolated examples of underperforming indicators but little evidence of any systematic underperformance. There are 9 examples from 2008 of Conformity indicators loading below the <0.400 threshold but these are generally one-off poorly performing measures. Only in Finland and Italy do 2 of the 3 Conformity indicators drop below the threshold; in both cases this is marginal and for 1990 the Conformity indicators have high loadings in both countries. Among the 1990 models, there are 5 indicators that are below the threshold and only Denmark has an example of 2 out of 3 low loading indicators on the Conformity factor. There is no example of a non-significant loading. The Traditionalism and Individualism measures show the least variation across countries. All the Traditionalism loadings are comfortably above the threshold. In general the same applies to Individualism; only in the 2008 Belgium model does there seem to be an issue with this factor, where 2 of the 3 loadings fall below the threshold. Overall, while it is unsurprising that there is some variation in the strength of the loadings across the 30 models, the basic factor structure itself appears sound.

The correlations between the factors are higher than is ideal in a number of countries – particularly those between Conformity and Traditionalism, and Authoritarianism and Traditionalism. It must be acknowledged that this is a limitation arising from drawing the Conformity and Traditionalism indicators from the same battery of EVS questions. However, there are also sound substantive reasons why these factors would correlate so strongly.

The model would appear to be applicable to each country in the analysis and remains stable at both time points. There are no clear examples of issues clustering among different country types and the outliers that do exist can be explained by issues of data quality rather than the specification of the measurement model. There appears some evidence to support the idea that the CFA measurement model captures aspects of an underlying political values structure, although it also shows that this may vary somewhat between countries.

Factor Scores

In order to investigate how the relative distribution of these values varies cross-nationally factor scores were estimated based on the latent factors from the CFA model. For latent factors the raw value of the factor score has little substantive meaning as all factors are constrained to have a mean of 0. The mean score for each overall factor in the pooled model is 0. However, this makes it possible to estimate the factor score for each country, relative to 0, at each time-point. Therefore, while the absolute value of the factor cannot be estimated, the relative value of the factor for each country can be. This allows for an exploration of country level patterns in the strength of each value. A country with a positive score has a relative mean factor score above the overall mean in the pooled data: a country with a negative score sits below the overall mean. This is illustrated by the bar charts in *Figures 3.4 to 3.11*. On these charts the 0 on the X axis represents the mean score for each value at the pooled level. The first comment to make is that there appears to be greater deviation from the mean for the Traditionalism indicator than any other. Differences are relatively small for Conformity as might be expected given the strongly positively skewed distribution of the Conformity indicators, which may reflect the potential illegality of the implied actions. But there is also relatively little variation on the Individualism factor compared with Traditionalism. Authoritarianism cannot be compared relatively on the same scale because it is a categorical factor.

Figure 3.4 Traditionalism factor scores 2008

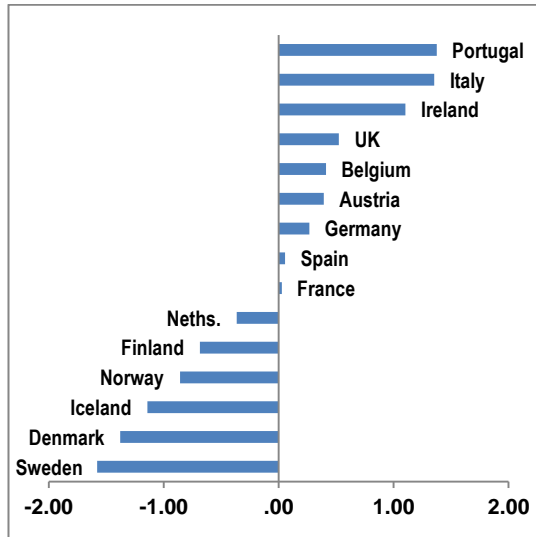
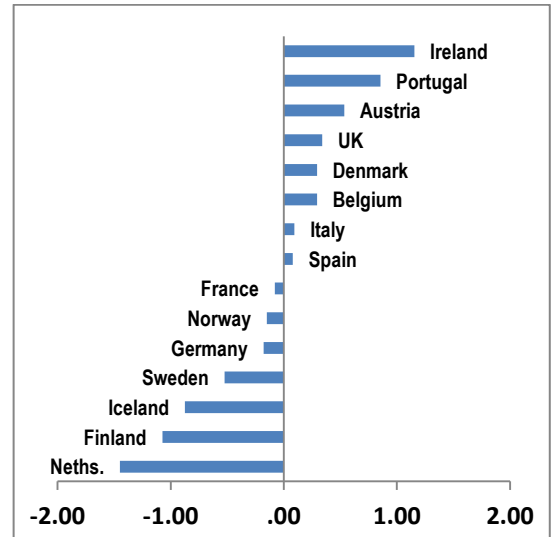


Figure 3.5 Traditionalism factor scores 1990



Looking at the relative scores for each factor highlights some interesting country level patterns and provides some early evidence of cross-national variation in the importance of values. For the Traditionalism factor there appears to be a consistent pattern across both time-points for Catholic and Southern European countries to be demonstrating levels of Traditional values that are positive relative to the mean; while Protestant countries of Northern Europe and Scandinavia demonstrate levels that are negative. The UK represents a notable exception to this – with positive levels of Traditionalism in both 1990 and 2008. It is also striking that there is little country level variation between the time points. Germany is the only country where there seems evidence of change in the relative importance of Traditionalism – it moves from having a level of Traditionalism that is negative relative to the mean in 1990 to one that is positive in 2008 (France does too but is very close to the mean level for both time points).

Figure 3.6 Authoritarianism factor scores 2008

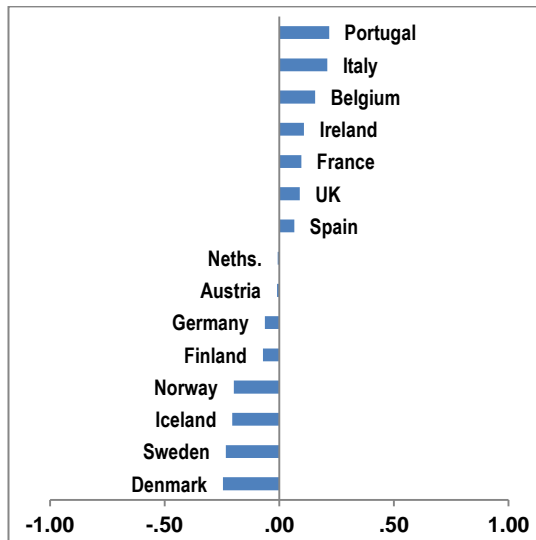
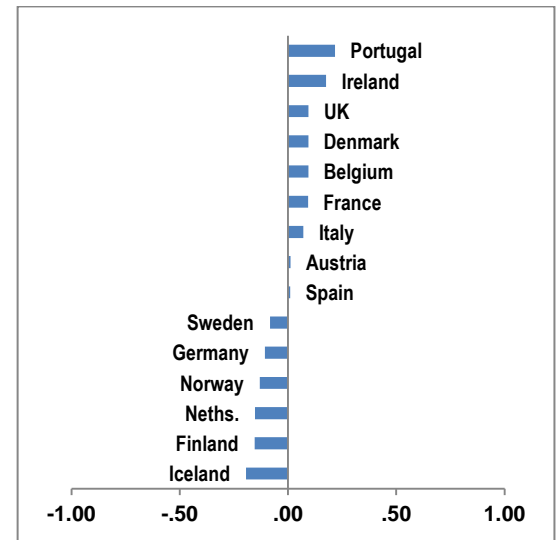


Figure 3.7 Authoritarianism factor scores 1990



There is a similar country level pattern regarding the Authoritarianism indicator. Portugal features as the country with the most positive score on Authoritarianism relative to the mean in both 1990 and 2008 and this is similar to its relatively high scores on Traditionalism. There appears to be evidence of a general pattern of Catholic countries having positive scores relative to the mean and Northern European countries having negative scores with the UK again being a clear exception to this with positive Authoritarian scores at both time-points. It is striking how relatively stable this pattern is across the two time-points. Only Austria moves from having a score that is positive relative to the mean in 1990 to one that is negative in 2008 but in both cases the deviation from the overall mean is small suggesting this is just an artefact of the relative value of the data.

Figure 3.8 Individualism factor scores 2008

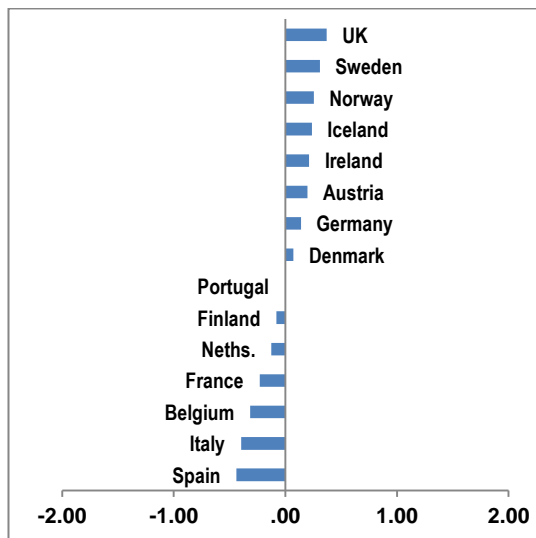
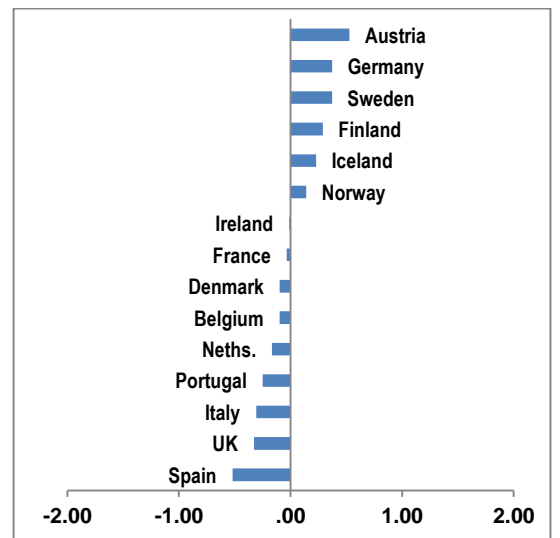


Figure 3.9 Individualism factor scores 1990



Individualism exhibits the opposite pattern – with Northern European and Scandinavian countries generally showing scores that are positive relative to the mean and Catholic countries scores that are negative, although there are more exceptions on this dimension. As with other factors, there is clear stability between the two time-points although the variation stands out as substantively interesting. Only two countries move from having a factor score that is negative relative to the mean to one that is positive: the UK and Ireland. The UK demonstrates a fairly dramatic change as it moves from having the second most negative score on Individualism in 1990 to the most positive in 2008. Ireland’s position relative to the mean, and to other countries, does not move as dramatically but it also moves from negative to positive. Finland, in contrast, moves the other way - from having a positive relative score in 1990 to a negative one in 2008. The Conformity factor scores behave differently – on this value dimension there is very little evidence of country level effects or consistency in the relative strength of Conformity between time-points. This may be reflective of there being lower levels of overall variance on the Conformity factor – countries generally cluster around the mean with few outliers. The Netherlands perhaps represents the only substantively relevant variation from this – with an outlying negative score relative to the mean at both time-points. It may also be relevant that Portugal has the highest positive Conformity score relative to the mean at the 2008 time-point, which means that Portugal has the highest positive score on 3 out of the 4 values dimensions in 2008.

Figure 3.10 Conformity factor scores 2008

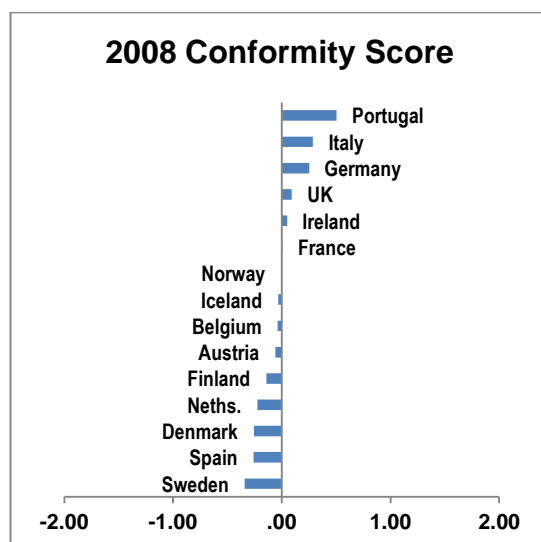
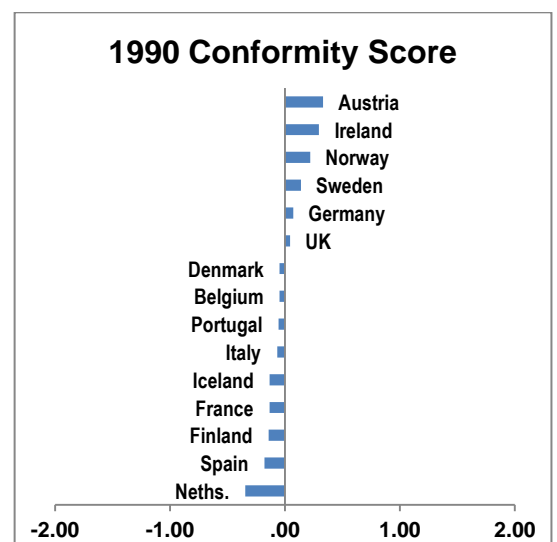


Figure 3.11 Conformity factor scores 1990



Overall, the factor scores highlight some interesting patterns in the data. There is evidence of the relative strength of values being strikingly clustered by country type – particularly Northern Europe and Scandinavia compared with Southern Europe and Catholic countries. The UK consistently features as an outlier that runs contrary to that pattern. In addition, the factor scores demonstrate the relative properties of the factors. They show that the value dimensions do vary between countries but the extent of that variation depends on the value. Traditionalism showed a relatively large amount of variance, Conformity relatively low. However, within each dimension the factor scores showed a high level of stability. With notable exceptions, countries that had a positive factor score on any specific value dimension at 1990 tended to remain positive in 2008. This suggests that while the underlying level of a particular value clearly does vary by country – the relative importance of that value remains stable. This provides a solid base for cross-national analysis although there are clearly implications for measurement invariance which are set out below.

Measurement Invariance

The previous sections highlight variation in both the strength of the value dimensions and the quality of the models between countries. This is an unsurprising finding given the latent nature of the values measures and the fact that values are generally considered to be rooted in national cultural context (Kluckhohn and Murray, 1953; Tetlock, 1986; Inglehart and Welzel, 2005, 2010). Improvement in the accuracy and scope of values measurement is an on-going iterative process, which incorporates many different approaches (Norris and Inglehart, 2004; Charnock and Ellis, 2004; Schwartz *et al.*, 2012). The discovery of variation in the quality of fit between countries of this particular CFA model is therefore to be expected given that it is using imperfect indirect attitudinal indicators for constructing the measures, and those values are political rather than individual. As a result they are more likely to be influenced by specific socio-political context. The summary of this variation in the quality of fit is demonstrated in *Table 3.8* and was discussed above when comparing the national level CFA results. Not even values measures as comprehensively rooted in theories of a universal human value system such as the Schwartz values have achieved complete cross-cultural comparability (Schwartz, 1992; Davidov *et al.*, 2011; Datler, Jagodzinski and Schmidt, 2013). Such an aim is likely to prove unattainable when dealing with such an abstract and culturally bounded construct as values. However, this does not mean that cross-national analysis of values measures is also invalid because that variation itself is of substantive interest and should not be discarded (Welzel and Inglehart, 2016). Identifying a similar values structure within each country but highlighting potential variation in the meaning and significance is substantively relevant and interesting. Nevertheless, this does pose some

fundamental challenges for using latent measures to carry out comparative research on values.

Table 3.8 Summary of Model Fit results by country and year

<u>2008</u>			<u>1990</u>		
COUNTRY	CFI	RMSEA	COUNTRY	CFI	RMSEA
Austria	0.909	0.054	Austria	0.971	0.036
Belgium	0.929	0.040	Belgium	0.929	0.041
Denmark	0.958	0.034	Denmark	0.883	0.063
Finland	0.940	0.044	Finland	0.927	0.048
France	0.947	0.040	France	0.991	0.018
Germany	0.871	0.063	Germany	0.963	0.037
Iceland	0.964	0.027	Iceland	0.950	0.037
Italy	0.962	0.029	Italy	0.924	0.045
Ireland	0.963	0.030	Ireland	0.962	0.034
Netherlands	0.961	0.038	Netherlands	0.952	0.045
Norway	0.923	0.049	Norway	0.920	0.050
Portugal	0.957	0.035	Portugal	0.961	0.028
Spain	0.805	0.069	Spain	0.889	0.051
Sweden	0.925	0.047	Sweden	0.921	0.043
United Kingdom	0.931	0.025	United Kingdom	0.974	0.026

The Multi-Group SEM function in *Mplus* allows for the most powerful test of the comparability of CFA models across different groups that is currently available to empirical researchers. It tests how well a CFA model fits the data according to a number of constraint assumptions in order to test for measurement invariance and therefore achieve thresholds of comparability. It allows the model for each country to be estimated separately, as in the previous stage of the analysis, but simultaneously so that it is constrained by the universal model fit. There are 3 stages of Invariance, and each must be established before the next can be tested. Configural Invariance is the minimum base level – it assumes that the factor structure remains the same in all Groups and is assessed by model fit and substantive judgement (Davidov *et al.*, 2011). If models are run independently, as in the previous section, and fit the data well then the criteria of comparable concepts then this establishes that the same concept is being captured across different groups.

Metric Invariance is tested by constraining the factor loadings and factor variances to be equal across groups. This tests the extent to which the latent measure has a similar structure across the groups. Finally, Scalar Invariance is tested by constraining the unique variances in the indicators. Measurement Invariance is established by showing that there is no substantial decline in the quality of the overall model fit when each constraint is added, thereby validating the decision to constrain the parameters. In the case of values, full Scalar Invariance is rarely established even

for recognised measures such as the Schwartz values and the more comprehensive versions of the Postmaterialism Index; however, it is technically required in order to compare mean scores across groups when the measure of interest is being used as a dependent variable (Davidov, Schmitt and Billiet, 2011; Datler, Jagodzinski and Schmidt, 2013). It is quite often the case that Metric Invariance is only established after making additional amendments to the model and excluding poorly performing countries. This opens up a debate in the literature regarding the extent to which researchers are being driven by data concerns in such instances (Davidov, Schmitt and Billiet, 2011; Welzel and Inglehart, 2016). Achieving a degree of partial metric invariance is the norm in cross-national values research (Allum, Read and Sturgis, 2011).

In this case, *Table 3.9* presents the model fit results of the Multi-Group test. Essentially this is the result of the test for Metric Invariance. When the model is applied in this way, the quality of the fit substantially declines compared with both the model for the pooled data and the average model fit when the model is applied to each national sample on an individual basis. These results from the multi-group analysis suggest that while Configural Invariance has been established in the previous stage of the analysis it will be very difficult for this CFA model to establish strong Measurement Invariance.

Table 3.9 Model fit results for Multi-Group test of Measurement Invariance

YEAR	χ^2	df	CFI	TLI	RMSEA
2008	11517.87	297	0.796	0.808	0.072
1990	2399.483	325	0.849	0.855	0.064

The model fit for both time-points are substantially below the standard margins of acceptability. As the fit of the model was so poor for the initial unconstrained Multi-Group test used to establish weak metric invariances, there was no justification for continuing to apply the tests for strong Metric or Scalar Invariance. However, in essence, this is simply confirming the findings presented above in the discussion of the factor scores. There is clearly substantial variation in the meanings and importance of these factors between countries. However, as set out at the beginning of the chapter, this was to be expected when taking a latent approach to values and it potentially enhances the overall analysis. Welzel and Inglehart (2016) have recently argued that in cross-national analysis the key test of the measurement of SEM structural model should be established through its capacity to predict external outcomes rather than its internal coherence. The argument is that, as regards independent predictors, cross-national variation in measurement models is likely to be reflective of genuine variance that is of interest rather than something to be controlled for. It is the substantive

relevance of the measurement model as a predictor that is important. In this instance the variance that has been demonstrated is a benefit to the study as it is indicative of the contextual variation that is being investigated. The factor scores demonstrated that this variation in the underlying meaning of the factors is not random or an artefact of misspecification or data error. It is more likely to be reflective of genuine real world country level differences regarding the strength of specific political values and is of substantive interest in itself.

Discussion

1. Is there a common political values structure across the West European Electorate?

It has been demonstrated that it is possible to use the European Values Survey to develop a multi-dimensional set of core political values measures. The 4 factor measurement model capturing Traditionalism, Conformity, Authoritarianism and Individualism when combined with a single item indicator for Egalitarianism represents a reasonable spread of 5 political values dimensions. These measures are generally consistent with prior research that has used this methodological approach in a single country context (McCann, 1997; Jost *et al.*, 2003)¹⁶. In addition, these values dimensions are clearly relevant to political division and electoral research: they can be used to validate existing theory regarding voter intentions and electoral trends. These 5 values clearly do not represent a complete range of core political values and they certainly do not reflect a universal human value system on a par with the Schwartz values. However, the relative stability of the model fits for the four factor solution suggests that the analysis has been able to develop a valid, if incomplete, multi-dimensional structure of latent political values. A viable multi-dimensional structure has been developed that appears to have some general substantive comparative validity. This will provide an important base for the analysis in subsequent chapters.

Hypothesis 1 – *There is a common values structure across the West European Electorate - is supported.*

The previous chapter demonstrated that electoral research using latent values measures tends to focus on only one or two specific measures, such as the extensive literature on Authoritarianism (Altemeyer, 1998; Jost *et al.*, 2003; Thorisdottir *et al.*, 2007; Matthews, Levin and Sidanius, 2009). Developing four valid measures simultaneously provides depth to the cross-national analysis, although clearly adding

¹⁶ There are no directly comparable examples of the Conformity measure being captured in latent approaches. This may be related to the specific range of data that exists in the EVS. The EFA analysis also confirmed the validity of Conformity as a separate factor.

complexity as it does also stretch the comparative viability of the measures. These values measurements sit in an awkward middle ground. Firstly, they do not entirely differentiate between core political values and individual values. There is an ambiguity in that regard because the values measures are clearly not equal in their 'political' nature. It is hard to claim that Conformity is as strong a core political value as Individualism, for example.

Secondly, due to limitations in the available data the study cannot claim to have developed ideal measures of each value or to have captured the entirety of the political values structure of the European electorate. For example, it would have been particularly instructive to have been able to generate a Security value. The data did not allow for this as the European Values Survey seems strongly skewed towards capturing the tension between modernity and tradition rather than more existential or abstract value positions. In the context of political research this results in an emphasis on moral conservative values set against individualist liberal values. There is a lack of questions related to more collective or existential value positions¹⁷. This means a somewhat imperfect single item measure will be used to operationalise Egalitarianism, while other measures such as Security and Benevolence cannot be operationalised. So while a multi-dimensional structure has been identified, it is partially limited in terms of the type of political values it captures. However, despite these limitations the value measures developed in the analysis clearly map on to existing political divides. Their relationship to key political indicators, such as party choice and left-right political identities, can be hypothesised based on previous findings in the literature.

As regards the extent to which the values measures remain constant over-time, the CFA model appears to retain the same factor structure at both time points. Whether a study that is primarily concerned with the influence of contextual factors should allow the underlying structure of the value measures themselves to vary is a key substantive issue here. While most values theories hold the central tenet that values remain stable, they concede the possibility of the importance of values being defined by social context (Rokeach, 1973; Schwartz, 1992). Therefore, theoretically, variance itself is not necessarily problematic.

Hypothesis 2 – The value structure of the West European electorate will be constant at the 1990 and 2008 time-points - is supported.

¹⁷ These three broad categories of political values from the literature (Moral/Conservative values, Liberal/Individualist values and Collective values, incorporating both Self-Transcendence and Self-Protection values) were identified in the previous methods review chapter.

2. Does the political values structure vary across countries?

The findings generally support the values structure itself. With few exceptions, the CFA model is an acceptable fit when applied on a single n basis to each of the 15 countries in the analysis. There are a number of examples in which the data quality may restrict the value of the comparison, but in no country was the fit and value of the factor loadings so consistently problematic as to suggest the underlying structure was invalid. There is considerable evidence that the basic 4 factor values structure is valid for all 15 countries, which provides a sound basis for comparative analysis. However, it should be acknowledged that there is often variation in both the quality of the model fit and the strength of the factor loadings between the countries. This suggests that while the basic values structure is valid across all the countries, the makeup of each value dimension may be unique to each country. There can be reasonable confidence that a form of latent core political value representing Conformity, Traditionalism, Individualism and Authority exists in these countries. What is less clear is whether each core political value has the same meaning and significance in each country. The structural aspect of the analysis should be able to demonstrate the substantive impact of these variations.

Hypothesis 3 –*The overall values structure will hold for each of the 15 Countries in the analysis - is partially supported.*

The findings from the national level models provide evidence for the viability of these values measures in each of the 15 countries in the analysis. Configural Invariance has been established; the values factors are viable in each of the countries. Potential issues for comparability occur when the model is tested in a multi-group environment simultaneously for all 15 countries, as it was not possible to establish metric measurement variance. It is hard to identify the precise reason for this in the existing literature on Multi-Group modelling (Brown, 2006; Mackinnon, Fairchild and Fritz, 2007; Davidov *et al.*, 2008; Davidov, Schmitt and Billiet, 2011). If the fit is adequate for groups when measured separately, it should remain adequate when modelled simultaneously. There is no systematic reason that appears to be causing this invariance. Removing countries from the dataset did not produce an obvious improvement in the model fit and it was not possible to substantively identify any specific country level patterns of influence in specific factors or indicators. The study can therefore proceed with caution knowing that the values dimensions themselves are robust in each national level sample but there may be some limits in their generalisable qualities. However, this variance in political values is both unsurprising and interesting as it suggests that there is contextual variation in the way in which different electorates interpret specific values (Welzel and Inglehart 2016).

The CFA scores did demonstrate some evidence of clustering by country type which is promising given the importance that is being attached to political context here. There was clear evidence of different values priorities between Southern European and Catholic countries and Northern European, Protestant and Scandinavian countries. This will be explored in more detail in subsequent chapters but it does provide further evidence of underlying variation in the strength of these values between countries, which has clear implications for the role they may have on vote choice. It also suggests that variation is rooted in political and cultural context rather than being a product of measurement noise. In other words, the variation in the factors outlined above can, at least partially, be accounted for substantively.

Hypothesis 4 – Any variation in the values structure will be clustered by country type - is partially supported.

The findings regarding the cross-cultural comparability of the CFA model are therefore ambiguous. However, this is also a viable and unsurprising substantive finding in itself. There is no convincing theoretical reason why specific core political values themselves retain consistent meaning across different national level contexts. Marietta and Barker (2007) have specifically warned against assuming this even when comparing local contexts within the same political system. There is no theory that states core political values are cross-culturally consistent, any more than it would be expected for the meaning of left-right to remain invariant (Purkko, Schwartz and Davidov, 2011). Therefore, instead of interpreting this lack of overall measurement invariance as a problem, the study can proceed on the basis that the variation in the measures between countries reflects political reality. The strength and exact makeup of these values are likely to vary across contexts for a wide range of reasons. This would be particularly expected of a latent values measure. The models do show that the West European electorate has in common political values of Traditionalism, Conformity, Individualism and Authoritarianism. That is an adequate basis for moving forward with the comparison.

3. Does the values structure provide a robust measurement model for cross-national comparative analysis?

The measures developed here can be used to address the core research questions of the overall thesis; particularly those questions related to political context. The assumption of variance is rooted in the theory that political values are primarily connected to electoral decision making through contextual influences. Aspelund and her colleagues (Aspelund, Lindeman and Verkasalo, 2013) and Leimgruber (2011) cast doubts on the viability of using universal human values measures to predict political behaviour and political attitudes on the basis that they represent too high a level of

abstraction. This study has already stated that it is taking a core political values approach, rather than a holistic one. This is primarily because the individual values measures sit at a higher level of abstraction and therefore may not capture the influence of political context. The evidence already exists showing that individual values are mediated by core political values, in which the influence on voter choice is context dependent (Schwartz, Caprara and Vecchione, 2010). Therefore a comparative approach using latent political values should treat evidence of slight variation in the makeup of specific values dimensions as an asset rather than a liability because it highlights the importance of political context.

Conclusion

This analysis represents the first full empirical chapter of the thesis. The aim was to take the core principles for developing latent political values measures, which were established in the previous chapter, and use them to identify a core political values structure across 15 countries in the EVS. In doing so, the chapter demonstrated the viability of a common underlying latent political values structure across the West European electorate. It also aimed to establish the cross-national viability of the values measures and assess whether the values structure was consistent over time.

The CFA analysis identified a stable 4 factor solution, which captured the value dimensions of Conformity, Traditionalism, Authoritarianism and Individualism. An additional single indicator can be used to capture a fifth value: Egalitarianism. This chapter has shown that the CFA model is stable when applied to the pooled data of all 15 countries at both the 2008 and 1990 EVS waves. It has also shown that there is sufficient evidence to suggest that this 4 factor solution can be applied to each country on an individual basis. However, when multi-group model constraints are applied to test the cross-national comparability in the meanings of the value structure, the fit of the pooled model substantially declines in quality. Full Measurement Invariance therefore could not be established. This limits some of the external comparative scope of the study, but still allows for a substantial assessment of the influence of political context on the value-voting relationship, which is the primary focus. However, the ultimate assessment of this measurement model will be the extent to which it can predict voting. Despite the necessary compromises that have been made in this chapter in order to operationalise the values dimensions, the measurement model that has been established should be sufficiently robust at the national level to produce a nuanced assessment of the association between values and voting. Modelling this direct relationship will be the focus of the next analytical chapter.

Chapter 4 Directly Modelling the Values-Voting Relationship

Introduction

The previous chapter developed a set of, primarily latent, political values measures that can address the core research questions of this study related to vote choice. The analysis demonstrated the viability of using a latent political values approach to address research questions that focus on cross-national variation within the core political values of the European electorate. This second empirical chapter begins to specifically address the key research questions related to values and voting. Subsequent chapters will explore the mechanisms through which individual values influence vote choice and analyse how political context shapes the values-voting relationship. As depicted in *Figure 4.1* this chapter focuses on exploring the basic direct relationship between political values and voting.

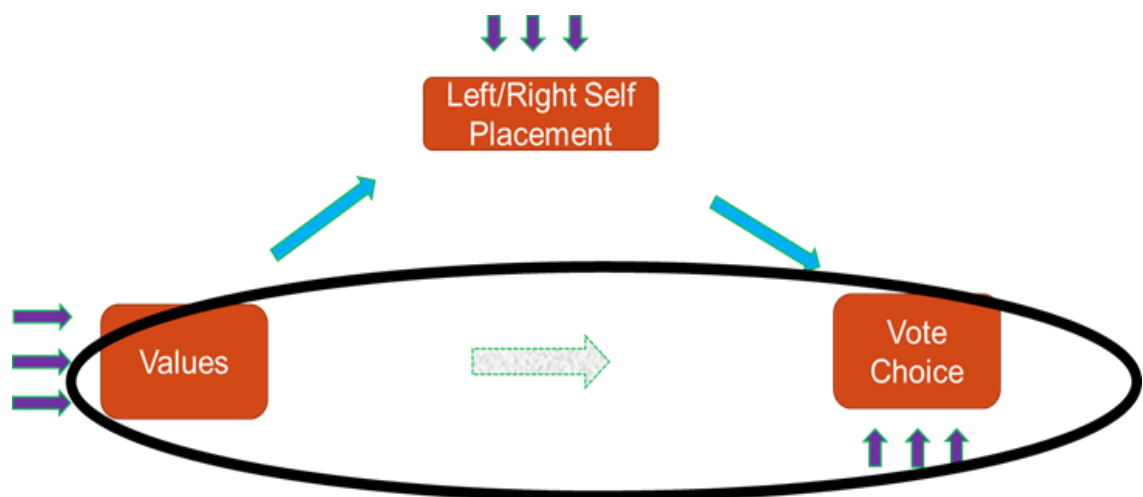


Figure 4.1 The relationship between values and voting

This stage of the analysis attempts to situate this study within the substantial prior literature that has used latent constructs to measure the relationship between core political values and voting and which was discussed at length in the literature review (Feldman, 1988; Evans, Heath and Lalljee, 1996; McCann, 1997; Goren, 2005 amongst others). From the internal perspective of this study the chapter has the primary aim of validating the utility of the values measurement model by demonstrating that it can predict party vote choice in a logical manner that is consistent with these prior studies. As Marietta and Barker (2007) observed this latent core political values approach to modelling voting has almost exclusively been applied in single *n* studies. Therefore, this chapter also aims to further demonstrate the utility of using a cross-national latent political values model to explore this

relationship across and between multiple national contexts, thereby establishing a sound base for the subsequent chapters that explore comparative aspects in the structure of this relationship.

The analysis uses the CFA model described in the previous chapter and builds this into a basic Structural Equation Model (SEM) treating vote choice as the dependent variable in a binary logistic regression framework. It will then use a multinomial framework to further validate this analysis. As with the previous CFA analysis, the full SEM models utilise data from the European Values Survey to model the relationship between values and voting at the 2008 and 1990 waves by pooling data from the 15 Western European Countries that feature at both time points. Based on the findings from the factor scores in the previous chapter further statistical purchase is achieved by splitting the existing West European sample into a simple Protestant and Catholic country typology to provide an initial exploration of contextual variation. This is consistent with prior work identifying cross-national variation in European Values (Inglehart and Welzel, 2005; Bartels, 2013). The analysis demonstrates 3 main substantive findings that advance some of the key arguments of this study related to the role of political context:

1. The values measurement model predicts vote choice in a stable and logical manner that is consistent with theoretical expectations and the findings of prior empirical research. The models show that the values measures are capable of realistically demonstrating the structure of both negative and positive relationships between values and voting. This is important for developing theoretically driven hypotheses regarding the influence of mediators on the values-voting relationship as it is necessary that both mediation and confounding effects can be clearly interpreted. In order to do that convincingly it is relevant that the values measures highlight significant negative associations between values and vote choice as well as positive.
2. There is clear evidence of variation in the way in which each of the 5 values in the model relates to vote choice. Specifically, there is a distinction between the two values that most clearly map onto the classic left-right political divide, Egalitarianism and Individualism, and the other less universally political values. Egalitarianism and Individualism appear more likely to operate as differentiators of vote choice along the left-right continuum. In the sense that if there is a positive association between Individualism and voting for parties of the right, then there will be a negative association with voting for parties of the left. Therefore these values, perhaps unsurprisingly, show evidence of uni-dimensionality. Positions on these values may be just as important to voters of these parties but they have directly opposing preferences regarding whether that value is desirable. Whereas

it is the differing emphasis of voters that more often explains the influence of Authoritarianism, Traditionalism and Conformity on vote choice. In others words there is evidence that these values have more overall importance to voters of specific party families and less importance to others: the influence they have on vote choice is related to differing priorities rather than opposing preferences. This is consistent with aspects of the recent political psychology literature regarding variations in political 'taste buds' between different groups of voters (Haidt, 2012).

3. The findings provide some *prima facie* evidence of significant contextual variation in the values-voting relationship, both between the two time points and across the two sub-samples. The model is not sufficiently advanced at this stage to speculate on the mechanisms and causes of this variation or to separate the role of aggregate variation in levels of political values from variation in political context. This is left to subsequent chapters. However, demonstrating this level of variation suggests that a contextual, cross-national approach is relevant to understanding the role of values in structuring vote choice preferences.

The chapter will proceed by outlining the background to the key research questions that it aims to address and stating the contribution that it makes to the development of the study. It will then move on to describe and justify the overall modelling framework that is being applied to measuring the relationship between values and voting in the next 3 empirical chapters. The findings of the SEM analysis of the direct relationship between values and voting will then be presented. Finally, it will discuss the implications of these findings in the context of the wider study.

Research Questions

1. Do the latent political values measures directly predict vote choice?

While the political values literature always assumes that there will be a relationship between values and voting, the nature and strength of that relationship is somewhat disputed and varies according to the values that are analysed. For example, Feldman (1988, 2003) and Marietta and Barker (2007) separately found that there is a relatively strong relationship between values and political preferences because they represent both the underlying structure of public opinion and a central heuristic mechanism through which parties appeal to voters. Jacoby (2006) on the other hand found more support for Converse's (1964) perspective by demonstrating that most voters are not consistent in making clear preference choice between different values and would therefore find it difficult to meaningfully connect those values preferences to a political choice directly. This study has up to this point argued that the primary

influence of values on voting is indirect and mediated by other political influences, such as a broader sense of political identity and the party system context. However, this assumes that a model which excludes these indirect pathways will highlight a significant direct effect. Prior research suggests political values can differentiate vote choice in a clear manner when they map on to long standing left-right cleavages (McCann, 1997; Caprara *et al.*, 2006, Marietta and Barker, 2007; Goren, Federico and Kittilson, 2009). As the values of Individualism and Egalitarianism most clearly map on to this divide, it is expected that they will have a stronger and better defined relationship with vote choice. Evidence regarding the other values in the model is more mixed and therefore a more exploratory approach will be applied. The following hypotheses are proposed:

Hypothesis 1 - *There will be a direct effect between values and voting which establishes the viability of the values measurement model as a predictor of vote choice.*

Hypothesis 2 - *There will be a stronger and more consistent relationship between Individualism and Egalitarianism and vote choice than the other value dimensions as these most clearly map onto the long-standing left-right divide.*

2. Do political values influence vote choice through both differentiation and emphasis?

In established West European political systems, in which the electorate splits along left-right lines, negative dispositions towards a specific value are likely to prove as important to political division as positive dispositions (Pioro, Schwartz and Davidov, 2011). For example, a negative association with individualism values may be just as important for voting Centre Left as a positive association with egalitarianism. Yet this is unlikely to prove the case in all contexts: it may vary according to the nature of political competition. In order to explore this dynamic in the mediation and contextual analysis, it is important that it can also be established in the direct relationship. Ideally, a multi-dimensional values structure should be able to identify whether a specific value operates primarily as a uni-dimensional differentiator of vote choice between different parties or represents a political division based on the emphasis of alternative value priorities.

The advantage of the measures that have been constructed here is that they allow for some exploration of both these aspects within the analytical framework of this chapter. This is for two reasons. Firstly, while not being a comprehensive holistic values structure, the 5 value measurement model still offers a multi-dimensional approach to comparing whether these values predict vote choice in different ways.

Secondly, the attitudinal indicators in the EVS allow the respondents to express both negative and positive responses in relation to a value – this captures both negative and positive aspects of hierarchical political values constraint (Peffley and Hurwitz, 1985). It is therefore possible to describe the following hypotheses based on expectations of the way different values may relate to vote choice, particularly regarding their likely interaction with left-right self-placement in the next stage of the analysis.

As outlined in the research question above it is reasonable to expect that Western European political competition between mainstream parties of the Centre Right and Centre Left will be dominated by classic left-right concerns related to freedom and equality. Therefore, the expectation would be that Individualism and Egalitarianism will be significant predictors of the vote for both party family types but will run in opposite directions. Values of Traditionalism, Conformity and Authoritarianism do tap into aspects of the left-right divide in some cases but they are also strongly associated with the rise of new parties of the left and right (Konstantinidis, 2011). Kitschelt and Hellems (1990) demonstrate that new parties insert new salient value dimensions into the electoral arena. Green parties in particular represent postmaterialist values and therefore often emphasise anti-Authoritarian and anti-Traditionalist positions. The opposite could be the case for the emergence of Nationalist parties of the populist right (Kriesi *et al.*, 2008). It is therefore expected that for smaller non-mainstream parties values will have a greater impact through variations in emphasis on these three values dimensions.

Hypothesis 3 - Individualism and Egalitarianism will be the main differentiators of vote choice among mainstream Centre Right and Centre Left parties according to known patterns of political competition.

Hypothesis 4 - The influence of Traditionalism, Conformity and Authoritarianism will be through varying emphasis rather than differentiation.

Hypothesis 5 – Traditionalism, Conformity and Authoritarianism will prove more important in predicting the vote of smaller party families.

3. Is there evidence of contextual variation in the values-voting relationship?

Subsequent chapters of this study will go into this area in significantly more depth. However, it is important at this stage of the analysis to demonstrate initial evidence of cross-national variation to justify the basic premise that the context of political competition influences the values-voting relationship. There is a substantial literature that looks at explanations for variation in the underlying political values and ideologies of electorates in established Western European democracies and the post-Communist democracies of Eastern Europe (Evans and Whitefield, 1995; Miller, White and Heywood, 1998; Thorisdottir *et al.*, 2007; Aspelund, Lindeman and Verkasalo, 2013; Bartels, 2013). Therefore, the importance of contextual variation in political values between regions has been consistently acknowledged in the literature. Using the Inglehart and Welzel (2010) framework it is possible to apply regional values typologies within a West European setting. Following on from the factor score findings in the previous chapter two broad regions will be considered by splitting the existing sample into two further typology subsamples: Protestant and Catholic. The analysis of factor scores presented in that chapter showed country clustering on these terms and suggests that this would be a fruitful starting point for demonstrating variation by context.

Hypothesis 6 is based on Inglehart and Welzel's (2010) finding that the values of Western European electorates can be split between Catholic and Protestant countries based primarily on their differing positions on issues of Moral Traditionalism. The values model allows for an assessment of the extent to which this is the case regarding vote choice preference. The expectation is that in Protestant countries political division has largely been structured by issues of economic distribution as reflected in left-right party competition. Therefore Egalitarianism and Individualism remain key uni-dimensional differentiators of mainstream Centre Right-Centre Left values preferences. According to classic cleavage theory, in many Catholic countries, core left-right party competition has also been supplemented by an additional secular-religious divide, which has proven to be equally enduring (Lipset and Rokkan, 1967; Dogan, 1998). It would therefore be expected that Traditionalism would act as an additional uni-dimensional differentiator of mainstream Centre Left-Centre Right vote choice in the Catholic subsample.

Hypothesis 6 - *In the Protestant sub-sample Individualism and Egalitarianism will be unidimensional differentiators of vote choice between the main Centre Left and Centre Right party groups, whereas in the Catholic sample Traditionalism will also differentiate the vote in this manner.*

Model Specification

Description of the dependent variable and justification of logistic framework

The key dependent variable in all the analysis that is presented from this point on is prospective vote choice (asked as 'which party do you intend to vote for at the next general election?'). This is clearly not an ideal measure of voting, especially when dealing with the relative distance between the survey collection date and the nearest general election in each country (*see Appendix 9*). It has been shown that the propensity to vote measure using stacked data offers a much more nuanced indicator of voting preferences and affords the researcher more flexibility in analysis. This captures a measure of voter's preference for each party relative to their preferences for other parties (Van der Brug, Van der Eijk and Franklin, 2007). It would have been a particularly useful method for capturing the variance in the values-party preference relationship. The EVS is not a political survey or an election survey and therefore the dependent variable is the best measure of vote choice that is available for this analysis. It is also a second stage question; the primary question asks if an individual will vote and if they say 'Yes' they are then prompted for who they intend to vote. Non-voters and undecided voters are included in this analysis as they are part of the sample of the electorate from which the measurement model is drawn, which makes this wider heterogeneity relevant to the study of political context. Not voting or not expressing a preference is therefore being treated as an active choice that is relevant to the party system context. Retaining non-voters in the analysis provides for a more accurate 'real world' assessment of the values-voting relationship, particularly when assessing the extent to which parties possess distinctive values profiles. In general, the study has taken a relatively conservative approach to analysing the values-voting relationship. The aim is to introduce heterogeneity into the model rather than specifically isolating the relationship between values and vote choice for different parties. This is primarily to avoid the risk of overestimating the importance of values as a predictor of vote choice and to capture the overall context of voting for each party.

The EVS takes no account of the time gap between the survey period and the next election in each country. Therefore, there is a wide range in the proximity between the survey dates and the nearest election: from an imminent election to one that is years away. It is therefore hard to claim that the snapshot of the electorate in each country is exactly comparable. This is a limitation that needs to be acknowledged when analysing pooled data in the manner set out in this analysis. However, it is a necessary compromise when using a cross-national data set that is not specifically an election dataset. In order to generate maximum purchase on the values indicators it was necessary to compromise on the ideal measure for the dependent variable.

Responses to the vote choice question were recoded into the following party families: 'Christian Democrat', 'Conservative', 'Social Democrat', 'Liberal/Centre', 'Communist/Left party', 'Nationalist' and 'Green'. In addition it was decided to rename 'Social Democrat' as 'Centre Left' and provide an additional Centre Right variable that combined the Conservative and Christian Democrat party families. This reflects the mainstream electoral competition that exists in all the countries in the analysis¹⁸ and therefore makes it easier to identify the extent to which certain values differentiate vote choice. This is a relatively crude coding scheme, but it maintains the large sample size and allows for an exploration of the extent to which values structure electoral support for parties along the left-right divide. This coding was carried out in accordance with the Comparative Manifestos Project (CMP) classification of party family (Volkens *et al.*, 2014). This involves experts classifying a party within a particular party family for each election. For the rare examples where a party was considered to have changed party family between the two time points the party was grouped according to its CMP classification at the election closest to the relevant EVS wave. Each party family or grouping was coded separately as a binary variable with 1 representing a vote for the party and 0 for those that did not vote for the party. For a full list of parties by family types please see *Appendix 10*.

There are some potential limitations to applying the CMP approach to party classification that should be acknowledged. By using the CMP classification the study is imposing expert assessments in defining the party family type as opposed to allowing the parties to define themselves. An alternative approach to developing a cross-national classification of party family type may have been to define the category of each party according to the political grouping it sits in within the European Parliament. Applying this method would have had the benefit of allowing parties to define their own cross-national party family as opposed to having that judgement imposed upon them by experts. However, this would potentially use a classification that is relevant at the European level to a cross-national analysis of national level vote choice. There is the possibility that the grouping allegiance of parties within the European Parliament is not automatically aligned according to ideological positions on the national level. The groups can also be a function of political manoeuvring purely at the European level. For example, the British Conservative Party's decision to leave the main Centre Right European People's Party grouping and ally itself with a disparate grouping, which included a number of nationalist parties, was based largely on disagreements related to policy at a European level. However, most experts would still consider the party to be ideologically aligned with other West European Conservative parties. Applying the classification in this analysis may have distorted the ideological profile of some of the party families; particularly those in the

¹⁸ With the exception of Ireland.

Nationalist category who sit across a number of groups in the European Parliament. Therefore, while the CMP classification is somewhat problematic in representing an independent assessment of parties rather than a statement of ideological self-identity, it is viewed as the most appropriate system to apply here because of its focus on the national level ideological divide.

For the primary analysis in this study an SEM logistic regression framework has been chosen as a more appropriate method than a categorical or multinomial regression framework. The logistic framework reduces the multi-category voting dimensions to a series of binary outcome variables that compare vote choice for the party against all alternatives. This approach was selected for a number of reasons: both methodological and substantive. Methodologically, there are a number of serious practical challenges in fitting and interpreting complex latent SEM path models with categorical outcome variables. A binary approach is more flexible and reliable, allows for the estimation of the full SEM pathway and is consistent with the mediation approaches to the values-voting relationship that have been applied in the Schwartz literature that this study is attempting to build on (Caprara *et al.*, 2006; Leimgruber, 2011). The primary interest in modelling the direct relationship between values and voting in this chapter is to establish the utility of the values measures as predictors that demonstrate the basic relationship between values and voting. This is done in order to establish the viability of both the measurement model and the full SEM mediation path model that will be applied in the next chapter of the analysis. To establish an indirect SEM path framework using a complex latent measurement model on a multi-category outcome variable is not possible to estimate using conventional software packages. The methodological literature related to *Mplus* advises against this approach and does not allow the estimation of the indirect effect function onto a multinomial outcome variable (Muthén, 2011; Muthén and Asparouhov 2015). Likewise, this full pathway relationship cannot be clearly estimated in *STATA* GSEM or SEM packages. The analysis is therefore to some degree practically constricted by the need to develop a consistent model building approach, so a binary logistic approach is applied at both the direct and indirect stage of the SEM analysis.

It is acknowledged that by splitting the multi-category outcome variable for voting into a series of binary variables the analysis creates a heterogeneous reference category. However, there are clear substantive reasons why applying a binary framework is nevertheless appropriate in the context of this study. It is argued that for the purposes of the analysis capturing this heterogeneity is of substantive interest as the study is concerned with the distinctive values profiles that parties have within the system as a whole rather than focusing on variance between party groups. Ultimately, the study is arguing that choice sets and the structure of the party system have an impact on the relationship between values and voting. The binary logistic

approach therefore measures the impact of values on voting for a party compared with all other options within the party system – a more conservative modelling strategy but one that captures the overall contextual aspect and highlights the distinctive values profile of each party. There is a greater danger for this study in underestimating heterogeneity. Focusing primarily on the categorical relationship across a series of between party choices would increase the risk of isolating those choices somewhat from the wider political context and overestimating the impact of values. For example, Traditionalism values may positively differentiate between voting for Christian Democrat parties and voting for Centre Parties. This would establish differences between the values of the voters for these parties but it does not necessarily highlight the extent to which Traditionalism represents an overall distinctive aspect of each party's values profile within the party system as a whole. It would also make it considerably more difficult to substantively interpret the overall influence of values on voting through mediation influences, which is critical to the aims of this study. The binary approach highlights these aspects more clearly and intuitively in relation to the contextual focus of this study. Therefore, both methodologically and substantively the more conservative binary framework strategy was chosen to address the core research questions here. However, the disadvantage remains that in using the binary logistic approach factors effecting voting for Centre parties may be obscured by the heterogeneous reference category. A multinomial model is therefore applied in this chapter on the direct relationship between values and voting in order to explore this issue and provide additional validation of the findings from the logistic framework.

Direct voting Modelling Strategy

There are five stages to the modelling strategy for exploring the basic direct relationship between political values and voting in this chapter. The first stage of the analysis uses the values measurement model to estimate the basic direct relationship between values and voting with the pooled data of the 15 Western European countries that feature in the 1990 EVS.¹⁹ This first stage applies the SEM structure using just the latent values (and the single indicator for Egalitarianism) to predict vote choice using the 2008 wave of the EVS. A series of models were run splitting the dependent variable, prospective vote choice at next general election, into relevant party families. Logistic regressions were estimated for each party family type (details described below). This approach will establish whether the values measurement model predicts vote choice, and whether it does so in a way that is consistent with prior research and theoretical expectations.

¹⁹ Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden and the United Kingdom.

The second stage of the analysis involves the addition of a limited number of socio-demographic controls to these models in order to test whether there is an independent direct relationship between values and voting beyond the influence of other social indicators of vote preference. The aim is to produce a parsimonious model that includes a minimal number of controls for age, gender, social class and political interest. This will establish the extent to which the values predictors have a genuine and independent direct effect on vote choice. It also provides a further test of the extent to which the values measures are distinct constructs that are having an independent influence on the dependent variable.

The third stage of the analysis tests the extent that the values-voting relationship remains stable over-time. In order to achieve this, the same values models that have been outlined above are applied to pooled data from the 1990 wave, as was done in the previous chapter for the CFA measurement model. There are clearly issues with direct comparison given that it must be acknowledged that the dependent variable itself is subject to change over the same period. However, the pooled nature of the data reduces some of this potential variance. This approach therefore provides useful additional purchase regarding generalised patterns in the relationship between values and voting.

The fourth stage of the analysis uses a multinomial approach in order to further validate the findings from the logistic framework and to demonstrate the viability of left-right self-placement as a potential mediator of this relationship. The first part of this analysis will estimate the basic relationship: measuring the extent to which values differentiate vote choice directly between parties when the Centre Left party family represents the base category. The Centre Left party family has been chosen as the base reference category in this analysis because it is the only example of a party family that exists in all 15 countries in the analysis. The second part of this analysis will introduce left-right self-placement into the model as an additional predictor in order to ascertain the attenuating influence it has on the values-voting relationship. This is *in lieu* of being unable to estimate the indirect effects of left-right as a mediator onto a multi-nomial outcome variable. Therefore, the first stage of this analysis represents the overall effect of values on voting and the second stage indicates how the introduction of left-right is likely to indirectly impact that relationship. In doing so the analysis provides a very basic test of the indirect effect that will be modelled in the next chapter with a full SEM structural model in a binary logistic framework. Baron and Kenny (1986) highlight this as a first step in demonstrating indirect effects. In essence, the first stage of the model with values only includes the unobserved indirect influence of the mediator. When the mediator is introduced to the analysis, the differences in the influence of the independent variable on the outcome highlight its potential as a mediator. The same two-stage analysis was also carried out keeping

the Centre party family as the reference category. This additional analysis is done in order to demonstrate the extent to which the relationship between values and Centre party voting may be underestimated within the logistic framework.

The final stage of the analysis focuses on the 2008 data and introduces an element of contextual variation into the model. This involves splitting the existing data set into 2 broad sub-samples, Protestant and Catholic. This should establish whether the measurement model is sufficiently comprehensive and robust to demonstrate the variation that exists between country types.

Descriptives

Tables 4.1 and 4.2 present the descriptive statistics for the variables used in this analysis. Table 4.1 shows the breakdown of party families and Table 4.2 the descriptive data for the controls. There are a number of examples of cases in which the respondent skipped the vote choice question, was not asked it or refused to reply. These cases have been removed from the analysis. The overall cases for 2008 and 1990 are large and relatively even at 20017 and 19202 respectively. When the 2008 pooled data is split into the 2 subsamples there is also a fairly even split in the sample size across the subsamples, with 9912 for the Protestant subsample and 10105 for the Catholic. As the EVS is fairly even in its sample sizes for each country this just reflects the fact that there is one more Catholic country in the data sample than Protestant.

Table 4.1 Party Family descriptives

2008 PARTY FAMILY DESCRIPTIVES			
Party Family	Pooled Data	Protestant	Catholic
<i>n</i>	<i>20017</i>	<i>9912</i>	<i>10105</i>
	<i>n</i>		
Social Democrat/Centre Left	4070	2192	1878
Centre Right	4755	2643	2112
Centre/Liberal	1022	697	325
Nationalist	738	427	311
Communist/Left Party	673	341	332
Green	851	398	453
Christian Democrats	1861	759	1102
Conservative	2894	1884	1010
1990 PARTY FAMILY DESCRIPTIVES			
Party Family	Pooled Data		
<i>n</i>	<i>19202</i>		
	<i>n</i>		
Social Democrat/Centre Left	4224		
Centre Right	4900		
Centre/Liberal	1367		
Nationalist	570		
Communist/Left Party	763		
Green	999		
Christian Democrats	2783		
Conservative	2159		

In carrying out the direct analysis at the pooled level using party families it is possible to keep the sample sizes for vote choice relatively high. This allows a range of party types to be analysed. It is clear that within this framework there is, unsurprisingly, quite a range in the size of the party family vote intention. This runs from Communist/Left Parties (673) to Social Democrat Parties (4070) in 2008; and from Nationalist (529) to Social Democrat Parties (4224) in 1990²⁰. While this is clearly reduced further for the 2008 Catholic and Protestant country subsamples, the sample sizes remain high enough to produce viable models. With one important exception there is little difference in the frequencies of support for party families between the two time-points. However, the number of Christian Democrat voters drops from 2783 in 1990 to 1861 in 2008. It should be noted that a large amount of this variation can be accounted for by the collapse of the Italian party system and the subsequent replacement of the Christian Democrat party by Silvio Berlusconi's Forza Italia (and its successors) as the main Centre Right party which is classified as Conservative.

Table 4.2 describes the distribution of the control variables. The Political interest variable runs from 1='Very interested' to 4='Not Interested at all' and is treated as a continuous variable in the analysis. It has been reverse coded in order to aid interpretation. The class measures were derived from the variable 'What is the Socio-Economic Status of the respondent?' which is an EVS measure based on the Goldthorpe Class Schema (Goldthorpe, Llewellyn and Payne, 1987) that assigns respondents to one of 7 social class positions based on their responses to questions regarding occupation. These responses were then further recoded into the two general class categories that are outlined shown in *Table 4.2* representing the standard division between working and middle class groups. The same process was followed for both the 2008 and 1990 datasets. It is acknowledged that overall this is a crude measure of class but it is designed to capture the broad overall influence of class on the values-voting relationship on [in?] the pooled samples. As would be expected for the period under study the variable highlights the overall change in the class structure of West European society during this period with a relative [needed here?] increase in members of the middle class between 1990 and 2008 and a [corresponding] decrease in the members of the working class. Class is included in the model as a binary categorical control variable with middle class coded as '1'. Gender is treated as a binary variable with female coded as '1'. Age is treated as a continuous variable. Left-Right is measured on a 10-point scale running from 0 = Furthest Left to 10 = Furthest Right. Respondents are asked to state where on this scale they would place themselves. Left-right is only included in the multinomial stage of the analysis.

²⁰ In both cases the Centre Right party family is actually the largest, but this reflects the split in the Centre Right party family between Conservative and Christian Democrat.

Table 4.2 Descriptive Data for Control Variables

2008 Descriptives Controls						
<i>N = 20017</i>						
<u>Continuous Variables</u>	<i>n</i>	Missing	Mean	SD	Max	Min
Age	19934	83	48.85	18.01	16	108
Political Interest	19915	102	2.58	0.99	1	4
Left-Right Self Placement	17989	2028	4.27	3.22	10	0
<u>Categorical Variables</u>	<i>n</i>	Missing				
Gender			Male	Female		
	20006	11	9185	10821		
Social Class			Lower	Middle		
	15697	4320	5214	10483		
1990 Descriptives Controls						
<i>n = 19202</i>						
<u>Continuous Variables</u>	<i>n</i>	Missing	Mean	SD	Max	Min
Age	19136	66	43.27	17.16	17	93
Political Interest	18967	235	2.72	1.06	1	4
Left-Right Self Placement	15996	3206	4.32	3.02	10	0
<u>Categorical Variables</u>	<i>n</i>	Missing				
Gender			Male	Female		
	19183	19	9142	10041		
Social Class			Lower	Middle		
	14186	5016	7593	6593		

The analysis presented below was carried out using the Structural Equation Modelling procedures in *Mplus*. The WLSMV estimator was used to account for the dependent variable and several indicators in the CFA measurement model being dichotomous. The goodness of fit was assessed using *Chi* Square tests and r^2 values as an assessment of the predictive strength of each model. The results presented below were produced by running the regressions on the vote intention for each party family separately against the latent values measures and the control variables within the SEM path model framework.

Results

Direct Pooled Model 2008

Table 4.3 presents the two models for the 2008 time point. Model 1 represents the baseline model in which the latent values measures are used to predict vote choice; Model 2 tests the robustness of these findings by introducing controls. The tables report the standardised co-efficients and standard errors with significant results at the $p < .005$ level highlighted in bold. The first point to make is that there is a large difference in the amount of variance that is accounted for in each party model. Model 1 shows that the base values model produces moderate r^2 figures for the Centre Left and Centre Right, accounting for 13.3% and 25.3% of the variance respectively. The minor party families that are traditionally categorised as being 'left' also have a respectable amount of variance captured by the values measures, with 16.8% for Communist/Left parties and 13.3% for Green Parties. Meanwhile values appear to account for very little of the variance in vote choice for Nationalist parties (3.1%) and Centre parties (1.2%). However, this is likely to be a reflection of the variation that exists within these party families pulling the pooled co-efficients in opposite directions rather than evidence that values are less important to voters for these parties. Finally, by far the strongest values model is for the Conservative party family representing 31.1% of the variance and more than double the 14.1% of the Christian Democrat model. Given the traditional basis of the support for the Christian Democrats, and the inclusion of Traditionalism in the model, this might be considered an unusual finding. It would be a reasonable expectation that values are likely to prove more important to voters of parties rooted in specific religious allegiances. However, it is likely that this is a reflection of the political nature of the values model. Conservative voters have relatively strong positive and negative associations with the two values that most clearly map onto the left-right political divide: Individualism and Egalitarianism. Christian Democrat voters do not show as strong associations on these values.

Table 4.3 Party Family Vote Choice Models 2008

2008 Model 1 (Values)	Centre Left	Centre Right	Centre	Nationalist	Communist	Green	Christian Democrat	Conservative
<i>n = 20007</i>	<i>4070</i>	<i>4755</i>	<i>1022</i>	<i>738</i>	<i>673</i>	<i>851</i>	<i>1861</i>	<i>2894</i>
Traditionalism	-0.214 (0.007)	0.150 (0.005)	0.026 (0.020)	0.178 (0.002)	-0.087 (0.002)	-0.067 (0.002)	0.325 (0.018)	-0.081 (0.003)
Individualism	-0.302 (0.016)	0.386 (0.014)	0.090 (0.003)	0.113 (0.002)	-0.255 (0.002)	-0.096 (0.002)	0.074 (0.008)	0.429 (0.005)
Authoritarianism	0.065 (0.024)	0.034 (0.021)	-0.030 (0.012)	-0.034 (0.011)	-0.102 (0.012)	-0.206 (0.013)	0.074 (0.018)	0.001 (0.017)
Conformity	0.126 (0.022)	0.046 (0.021)	0.003 (0.020)	-0.107 (0.020)	-0.042 (0.023)	-0.101 (0.021)	-0.019 (0.019)	0.087 (0.022)
Egalitarianism	0.144 (0.004)	-0.252 (0.005)	-0.055 (0.003)	-0.045 (0.001)	0.254 (0.001)	0.167 (0.001)	0.015 (0.008)	-0.337 (0.002)
Chi Square (df)	740.358 (39)	745.479 (39)	718.964 (40)	783.928 (38)	818.877 (40)	803.15 (39)	780.893 (39)	720.362 (39)
RMSEA	0.03	0.03	0.029	0.032	0.03	0.03	0.031	0.03
r²	0.133	0.253	0.012	0.031	0.168	0.133	0.141	0.311
2008 Model 2 (Controls)	Centre Left	Centre Right	Centre	Nationalist	Communist	Green	Christian Democrat	Conservative
<i>n = 20007</i>	<i>4070</i>	<i>4755</i>	<i>1022</i>	<i>738</i>	<i>673</i>	<i>851</i>	<i>1861</i>	<i>2894</i>
Traditionalism	-0.225 (0.011)	0.158 (0.011)	0.073 (0.011)	0.121 (0.016)	-0.093 (0.007)	-0.058 (0.017)	0.343 (0.012)	-0.073 (0.012)
Individualism	-0.301 (0.013)	0.398 (0.013)	0.059 (0.013)	0.135 (0.018)	-0.263 (0.018)	-0.105 (0.020)	0.106 (0.015)	0.419 (0.014)
Authoritarianism	-0.003 (0.053)	0.055 (0.055)	0.014 (0.055)	-0.007 (0.084)	-0.088 (0.093)	-0.135 (0.061)	0.048 (0.063)	0.048 (0.060)
Conformity	0.113 (0.013)	-0.013 (0.013)	0.025 (0.013)	-0.036 (0.019)	-0.003 (0.019)	-0.062 (0.018)	-0.083 (0.005)	0.053 (0.014)
Egalitarianism	0.142 (0.005)	-0.260 (0.005)	-0.055 (0.005)	-0.052 (0.007)	0.274 (0.008)	0.180 (0.008)	0.009 (0.006)	-0.336 (0.005)
Age	0.024 (0.001)	0.146 (0.001)	-0.016 (0.001)	-0.068 (0.001)	-0.123 (0.001)	-0.194 (0.007)	0.168 (0.001)	0.058 (0.001)
Gender	0.048 (0.023)	-0.017 (0.026)	0.012 (0.026)	-0.136 (0.042)	-0.004 (0.041)	0.123 (0.041)	0.016 (0.031)	-0.033 (0.029)
Middle	-0.204 (0.032)	0.150 (0.034)	0.135 (0.034)	-0.112 (0.050)	-0.124 (0.049)	0.287 (0.054)	-0.077 (0.037)	0.262 (0.005)
(Ref: Lower)								
Political Interest	0.029 (0.014)	0.020 (0.014)	0.038 (0.014)	0.028 (0.022)	0.065 (0.022)	0.021 (0.084)	0.002 (0.017)	0.029 (0.017)
Chi Square (df)	8250.292 (79)	8266.534 (79)	8315.752 (80)	8396.004 (80)	8241.376 (79)	8255.845 (79)	8292.038 (79)	8249.929 (79)
RMSEA	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082
r²	0.165	0.293	0.025	0.065	0.195	0.166	0.163	0.342

Note: Standardised beta co-efficients reported. Figures in **bold** significant at the $p < 0.005$ level.

Model 1 shows that the values model can directly predict voting and there are promising signs that it represents a robust predictor of vote choice. While not all values are significant predictors of vote choice in all models, all of the values are significant predictors of vote choice for at least 4 of the party families. In addition, they appear to be predicting vote choice in a manner that is consistent with prior expectations and research findings. Positive dispositions towards Individualism predict votes for Centre Right parties, while negative dispositions predict votes for the Centre Left parties; with the reverse being the case for Egalitarianism. A similar differentiation can be demonstrated in relation to Traditionalism. With the possible exception of the relatively strong positive effect for Conformity (and weaker positive effect for Authoritarianism) on Centre Left voting, there do not appear to be any co-efficients that could be considered unexpected. It is interesting to note that there is a significant negative relationship between Conformity and voting Green. Overall, it is possible to be reasonably confident that the basic values model is working as expected and generating relevant substantive results.

There is also some evidence that value emphasis is relevant to voting for different parties. The clearest evidence for this is when the Centre Right party block is broken down into its Conservative and Christian Democrat constituent parts. There is a difference in values emphasis between voters for these parties. The Conservative voters emerge as focused on the key left-right political values of Individualism and Egalitarianism. Co-efficients of 0.429 and -0.337 represent the strongest two predictive effects of a specific value on vote choice in any of the party family models. For the Christian Democrats the evidence suggests that it is Traditional values, unsurprisingly, that are the largest values predictor of the vote with a strong positive effect of 0.325 . The effects for Individualism and Egalitarianism are far smaller. In the case of Egalitarianism, there is no significant relationship with the Christian Democrat vote. Traditionalism appears to differentiate between Christian Democrat and Conservative voters in this model: there is a small but significant negative effect of -0.081 for Traditionalism on the Conservative vote. This shows that aspects in the Centre Right 'party family' are pulling against each other and the unified model probably underestimates the overall impact of values on the Centre Right vote. The model provides evidence that there is a complex values structure underpinning vote choice.

Results are varied for the smaller parties. The values model is a poor predictor of the Centre party vote. There are significant, but small relationships between Individualism and Egalitarianism and Centre Party voting. It is possible that support for these parties is more dependent on national context than for other more ideologically distinctive party family types, which makes it harder for pooled models to establish a clear values profile for Centre Parties. It is also possible that the binary

regression framework underestimates the influence of values on Centre party voting – the heterogeneity in the reference category may well obscure some of the effects of values on Centre party voting. This will be further discussed in the multinomial section of the analysis. The relationship between values and voting for the two minor party groups of the left has a very similar structure. It is interesting variation that Traditionalism is a negative predictor of the Green vote (-0.067) and the Communist vote (-0.087) but that Conformity only has negative association with Green voting (-0.101). This may highlight a different values emphasis among voters for these parties. Even more relevant is that the relationship with values for both the Green and Communist parties is different from the Centre Left. This is most clearly evident in the effects for Authoritarianism and Conformity, where there is some evidence of a difference between old and new political values. The relationship between values and the Nationalist vote is the hardest to interpret. Generally, it appears to follow the same pattern as for the Centre Right vote, though with weaker effects. The exception is Conformity, at -0.107 this represents the largest negative association between Conformity and vote choice for any party family. It is interesting that there is a negative relationship between Conformity and voting for each of the three 'fringe' party groups (though for Communists it is not significant). This could be reflective of a general 'anti-system' sentiment among fringe parties across the political spectrum.

Model 2 introduces the socio-demographic controls into the model: age, gender, class and political interest. Left-Right is not included as a control because the study is theorising that values underpin left-right identity and it therefore mediates the values-voting relationship. This will be dealt with primarily in the next chapter and, briefly, in the multinomial analysis which isolates that effect. The main finding in Model 2 is that the controls have little impact on the values indicators, suggesting that values are having an independent direct effect in these models that is robust and not merely a function of social factors. The addition of controls marginally increases the effect of all the values dimensions in the Centre Right model and renders Authoritarianism significant with the Centre Right vote. Conversely the controls appear to dampen the impact of Authoritarianism on the Centre Left vote, producing a non-significant relationship. However, with a few exceptions, the structure of the relationship between values and voting appears very similar in both models. Therefore these findings suggest that the direct effect between the political values measures and vote choice is robust and relatively strong.

Direct Pooled Model 1990

The next stage is to establish if these findings are stable and consistent at different time-points. *Table 4.4* presents identical models as *Table 4.3* but was run using pooled data from the 1990 EVS dataset. The headline finding is the similarity between these models and those run in *Table 4.3* for 2008. For the main Centre Right and Centre Left party groupings the differences in the structure of the values-voting relationship are minor. As in the 2008 models, a substantially greater proportion of the variance is accounted for in the Centre Right than Centre Left models, at 21% to 11%. However, a greater variety of values are significant predictors of the Centre Left vote. This seems to be a consistent pattern within the models and suggests Centre Right voters may have a stronger identification with core left-right issues.

Table 4.4 Party Family Vote Choice Models 1990

1990 Model 1 (Values)	Centre Left	Centre Right	Centre	Nationalist	Communist	Green	Christian Democrat	Conservative
<i>n</i> = 19202	4224	4900	1221	529	763	999	2783	2159
Traditionalism	-0.184 (0.013)	0.320 (0.013)	-0.199 (0.017)	0.127 (0.024)	-0.206 (0.018)	-0.173 (0.016)	0.408 (0.013)	0.067 (0.015)
Individualism	-0.250 (0.011)	0.253 (0.011)	0.117 (0.016)	0.266 (0.019)	-0.296 (0.015)	-0.042 (0.015)	0.085 (0.011)	0.311 (0.013)
Authoritarianism	0.083 (0.039)	0.047 (0.050)	-0.006 (0.074)	-0.215 (0.100)	-0.221 (0.087)	-0.118 (0.052)	0.134 (0.052)	-0.077 (0.023)
Conformity	0.202 (0.021)	-0.019 (0.021)	0.092 (0.029)	0.003 (0.038)	0.054 (0.042)	-0.136 (0.024)	-0.096 (0.023)	0.095 (0.026)
Egalitarianism	0.192 (0.004)	-0.178 (0.004)	-0.182 (0.006)	-0.092 (0.007)	0.241 (0.006)	0.001 (0.006)	-0.009 (0.004)	-0.295 (0.005)
Chi Square (df)	2162.362 (43)	2114.32 (42)	2117.604 (43)	2120.82 (43)	2103.494 (43)	2111.129 (42)	2222.835 (42)	2093.916 (42)
<i>r</i> ²	0.112	0.21	0.08	0.109	0.267	0.127	0.209	0.211
1990 Model 2 (Controls)	Centre Left	Centre Right	Centre	Nationalist	Communist	Green	Christian Democrat	Conservative
<i>N</i> = 19202	4224	4900	1221	529	763	999	2783	2159
Traditionalism	-0.144 (0.013)	0.345 (0.012)	-0.220 (0.018)	0.001 (0.023)	-0.288 (0.020)	-0.194 (0.016)	0.371 (0.013)	0.128 (0.018)
Individualism	-0.179 (0.012)	0.214 (0.012)	0.025 (0.019)	0.256 (0.023)	-0.302 (0.017)	-0.030 (0.017)	0.163 (0.013)	0.185 (0.017)
Authoritarianism	0.019 (0.046)	0.061 (0.022)	0.010 (0.069)	-0.146 (0.067)	-0.046 (0.080)	-0.192 (0.082)	0.036 (0.046)	0.069 (0.021)
Conformity	0.117 (0.023)	-0.014 (0.022)	0.026 (0.033)	0.062 (0.042)	0.123 (0.038)	-0.019 (0.025)	-0.036 (0.025)	0.052 (0.033)
Egalitarianism	0.150 (0.004)	-0.158 (0.004)	-0.161 (0.007)	-0.007 (0.008)	0.205 (0.007)	0.002 (0.006)	-0.066 (0.004)	-0.242 (0.006)
Age	0.009 (0.010)	0.190 (0.001)	-0.031 (0.024)	0.034 (0.034)	-0.156 (0.004)	-0.020 (0.001)	0.126 (0.021)	0.162 (0.013)
Gender	-0.005 (0.024)	0.053 (0.023)	-0.021 (0.035)	-0.014 (0.047)	-0.072 (0.040)	0.055 (0.034)	0.064 (0.024)	0.026 (0.033)
Middle	-0.261 (0.033)	0.091 (0.031)	0.068 (0.044)	0.175 (0.031)	-0.154 (0.062)	0.181 (0.037)	-0.003 (0.032)	0.136 (0.031)
(Ref: Lower)								
Political Interest	0.013 (0.012)	0.018 (0.012)	0.101 (0.018)	0.052 (0.012)	0.108 (0.019)	0.012 (0.016)	0.031 (0.012)	0.031 (0.012)
Chi Square (df)	6831.489 (86)	6766.578 (85)	6806.516 (86)	6776.24 (86)	6818.379 (86)	6742.336 (85)	6792.659 (85)	6803.885 (86)
RMSEA	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.076
<i>r</i> ²	0.095	0.242	0.098	0.112	0.246	0.228	0.183	0.175

Note: Standardised beta co-efficients reported. Figures in **bold** significant at the *p* < 0.005 level.

There is, however, evidence of greater variation in the values-voting relationship among the other parties. The most intriguing findings are for the Christian Democrat and Conservative vote. Unlike 2008, in which the variance accounted for by values in the Conservative vote dwarfed that of the Christian Democrats, in 1990 there is very little difference between them. Values account for 21% of the variance for both party groups. The key finding though is that the relationship between Traditionalism and voting runs in the same direction in 1990. In 1990 there is a positive significant (though weak) relationship between Traditionalism and voting Conservative at 0.067 , which shows Traditional values have a positive effective on the Conservative vote in 1990 as opposed to a significant negative effect in 2008. Therefore, on Traditionalism there is evidence that the values-voting relationship for the Conservative vote may have liberalised over the 18 year period. Beyond that it appears to remain the case that the Conservative vote is more rooted in the core left-right divide. Egalitarian values have a non-significant relationship with the Christian Democrat vote in 1990, while the negative association between Egalitarianism and Conservative voting remains significant at -0.295 .

Findings for other party types are again variable. The values model for the Communist vote in 1990 is remarkably similar to 2008 but the relationship between values and Green voting is interesting. The 1990 model gives Green party voting a much more distinctive values profile. The values of Individualism and Egalitarianism do not have a significant effect on the Green vote in 1990 but the other 3 values dimensions clearly do. There are significant negative associations between Green Voting and Authoritarianism (-0.118), Conformity (-0.136) and Traditionalism (-0.173). This is a much clearer values profile of a distinctive 'New Politics' party family than the 2008 findings show for Green voting. In 2008 it appears that Egalitarianism and Individualism are just as relevant to the Green vote as other values. This could represent the Greens becoming more consolidated within the existing party system over that 18 year period. Initially it appears that there is a larger effect for values on voting for the Nationalist and Centre party vote in 1990 than for 2008. However, Model 2 shows that once the controls are introduced these effects are reduced and again it looks like values have a relatively small impact in predicting the vote for either of these party types. It is interesting that Authoritarianism negatively predicts the Nationalist vote at both time-points though.

In general, the addition of controls in 1990 appears to have a stronger dampening effect on the predictive strength of the values than in 2008 but overall impact on the values-voting effects is similar. For the Centre Left and Centre Right parties the addition of the controls appears to have the same effect on the values predictors in 1990 as they do in 2008. The controls render Authoritarianism non-significant for the Centre Left vote and significant for the Centre Right, which reverses the findings from

the base model. The addition of the controls completely reverses the direction of the co-efficient for the effect of Authoritarianism on the Conservative vote from a significant negative co-efficient of -0.077 to significant positive one of 0.069 , although the relationship clearly remains weak. In 2008 this relationship is not significant. It is also worth noting that the addition of the controls, as in 2008, renders the influence of Authoritarianism on the Christian Democrat vote non-significant.

The findings from the 1990 and 2008 models suggest similar patterns in the values-voting relationship over time. This provides further evidence that the values model represents a robust measure of the value-voting relationship, as it is consistent with literature arguing values are stable constructs that change little at the individual level (Rokeach, 1973; Inglehart, 1997). Where there is variation it appears linked to increasing levels of cultural liberalisation in European societies between 1990 and 2008 or possibly to the changing positions of the parties in response to this. The analysis in the next chapter will address these variations. At this stage, what is relevant is that there is further evidence of stable values structures.

Multinomial Models

Table 4.5 presents the results of a basic multinomial regression model that used the Centre Left party family as the base category. This analysis was carried out in order to provide additional validation of the findings from the logistic regression framework and to tease out potential further variation in the values-voting relationship that may be obscured by the heterogeneous binary reference category. It also provides an initial test of the influence of left-right self-placement on the values-voting relationship ahead of the mediation analysis in the next chapter²¹. Model 1 presents the basic relationship between values and voting for each of the party families compared with voting for the Centre Left. Model 2 introduces left-right into the model to measure the extent to which it attenuates the effect of the values measures. This is done in order to provide a simple initial assessment of the possible impact of left-right as a mediator of the values-voting relationship.

²¹ To restate, the Centre Left party family has been included as the reference category in this analysis because this is the only party type that features in all 15 countries at both time-points in the analysis.

Table 4.5 Multinomial Party Family Choice Models with Centre Left Party as the Base Category

<i>n</i> = 20007									
Model 1 Party Family v Centre Left 2008 (Values Only)									
VALUES	Christian Democrat	Conservative	Centre	Nationalist	Communist	Green	AIC	BIC	DF
Individualism	0.581 (0.046)	0.923 (0.027)	0.649 (0.052)	0.726 (0.073)	-0.245 (0.066)	0.177 (0.055)	805861.241	806333.950	66
Conformity	0.191 (0.052)	0.010 (0.047)	-0.107 (0.073)	-0.330 (0.068)	-0.296 (0.063)	-0.405 (0.053)			
Traditionalism	0.849 (0.044)	0.098 (0.041)	0.81 (0.049)	0.418 (0.060)	-0.087 (0.064)	-0.165 (0.055)			
Egalitarianism	-0.080 (0.012)	-0.274 (0.012)	-0.121 (0.014)	-0.122 (0.019)	0.156 (0.018)	0.069 (0.016)			
Authoritarianism	0.368 (0.047)	0.009 (0.041)	0.006 (0.057)	0.028 (0.070)	-0.98 (0.074)	-0.474 (0.069)			
Model 2 Party Family v Centre left 2008 (Values and Left-Right)									
VALUES	Christian Democrat	Conservative	Centre	Nationalist	Communist	Green	AIC	BIC	DF
Individualism	0.342 (0.049)	0.821 (0.052)	0.464 (0.054)	0.441 (0.074)	-0.151 (0.064)	0.137 (0.070)	699992.433	700502.905	72
Conformity	0.107 (0.056)	-0.008 (0.048)	-0.151 (0.085)	-0.389 (0.073)	-0.251 (0.064)	0.413 (0.055)			
Traditionalism	0.697 (0.058)	-0.053 (0.28)	0.069 (0.064)	0.262 (0.066)	-0.018 (0.064)	-0.190 (0.057)			
Egalitarianism	0.012 (0.015)	-0.168 (0.014)	-0.059 (0.015)	-0.049 (0.021)	-0.049 (0.021)	0.035 (0.022)			
Authoritarianism	0.276 (0.050)	-0.007 (0.049)	-0.005 (0.059)	-0.067 (0.079)	-0.79 (0.073)	-0.490 (0.068)			
Left-Right	0.711 (0.023)	0.956 (0.024)	0.507 (0.024)	0.861 (0.032)	-0.385 (0.030)	0.127 (0.024)			

Note: Standardised beta co-efficients reported. Figures in **bold** significant at the $p < 0.005$ level.

The first observation to make is that, while the multinomial model predictably exhibits larger effects of values on voting, the overall pattern in the relationship for the main party families is similar to the logistic models. Conservative values voting remains largely dominated by the two core political values of Individualism and Egalitarianism with other values having small to negligible effects. Conversely, all the values measures are significant for predicting Christian Democrat voting in the initial model and the effect of Egalitarianism is noticeably weaker to that for all other parties. The model also suggests that values maintain a comparatively small influence on Centre Party voting compared to other party families. Using Centre Left as the base category does demonstrate a larger effect of Individualism and Egalitarianism on Centre Party voting but other values continue to show a negligible influence. Centre Party voting appears to represent a weaker version of the Conservative values profile in this regard. The model highlights stronger differences in vote for the minor party groupings and this also accentuates the relationship demonstrated in the binary models. For Green voting it highlights more clearly the effect of the 'new politics' values of Authoritarianism, Traditionalism and Conformity over the comparatively small effects for Individualism and Egalitarianism. There is some evidence of the reverse being the case for the Communist vote (Conformity excepted). The relationship for the Nationalist vote is more varied but also represents an accentuated version of the 2008 logistic findings. It is interesting that Authoritarianism still does not predict the Nationalist vote even when compared with Centre Left as the base category – this will be further explored in the next chapter.

The addition of left-right as an additional predictor in the model unsurprisingly attenuates the effects of the values measures. However, this impact varies by specific value and party type. Introduction of left-right has a small effect on reducing the influence of values in the Conservative model for Individualism and Egalitarianism. However, it renders the effect of Traditionalism non-significant and reverses the direction of the co-efficient. It has a similar influence on the impact of Egalitarianism in the Christian Democrat model, while it only has a small effect in reducing the strength of the co-efficient between Traditionalism and Christian Democrat voting. This shows evidence that introducing left-right into the model has a relatively minor impact on the core political values that appear most distinctive to the voting profile of each party family type, but it does have a strong impact in reducing the effect of other values on voting, suggesting some initial evidence of partial mediation. This is relevant for the path analysis in the next chapter – it suggests the direct effect of some core political values may be stronger than originally theorised in the first half of the thesis.²²

²² *Appendix 11* shows the same models applied to the 1990 data and highlights similar patterns in the relationship between values and voting and on the influence of left-right.

Multinomial Models were also estimated using Centre Party as the reference category. This was done in order to ascertain the extent to which the influence of values on Centre Party vote is being under-estimated due to the reference categories that have been applied in the analysis thus far. In order to remove further noise from the model any country which did not contain Centre Party voters was excluded from the analysis to avoid the danger of imposing a false choice in the multinomial framework²³. *Table 4.6* presents mixed results in this regard. It does suggest that the more heterogeneous reference categories may obscure the strength of the values effect on Centre Party voting for certain values in each party model. For example, it shows that there is a distinctive difference between the values that differentiate Centre Party and Christian Democrat vote from those that differentiate Centre Party and voting for the Conservatives or the Centre Left. It is the values of Traditionalism and Authoritarianism that are relevant to the Christian Democrat model, whereas Individualism and Egalitarianism are relevant to the Conservative and Centre Left vote (as would be expected, running in diametrically opposite directions). However, these findings also support the logistic model in suggesting that Centre parties themselves do not have a distinctive values profile. The relevance of values to the Centre Party vote here is defined in opposition to the distinctive profile of each of the other main party families. In other words, a relatively strong relationship is exhibited between Individualism and Egalitarianism when compared with Centre Left and Conservative Party families but this does not hold in all models. Likewise, Traditionalism and Authoritarianism are relevant values when compared with the Christian Democrat party family but there is little evidence to support these values being generally relevant to Centre Party voting overall – only in comparison with the Christian Democrats. This is further supported when looking at the effects on minor party family vote. With the exception of the relationship with Green Voting these effects are relatively small and the introduction of left-right renders a number of them non-significant, suggesting evidence of partial mediation.²⁴

²³ For 2008; Austria, Ireland, Italy, Portugal and Spain. For 1990; France, Iceland, Ireland, Italy and Portugal.

²⁴ *Appendix 11* shows the same model run for the 1990 Data. These models suggest an even weaker values profile – with Egalitarianism not differentiating the voter with the Conservative Party family. Only Individualism shows a significant relationship with Conservative voting.

Table 4.6 Multinomial Party Family Choice Model with Centre Party as the Base Category

<i>n</i> = 14441									
Model 1 Party Family v Centre 2008 (Values Only)									
VALUES	Centre Left	Christian Democrat	Conservative	Nationalist	Communist	Green	AIC	BIC	DF
Individualism	-0.670 (0.027)	-0.068 (0.057)	0.539 (0.056)	0.077 (0.088)	-0.720 (0.079)	-0.472 (0.069)	805861.228	806333.937	66
Conformity	0.086 (0.074)	-0.082(0.065)	0.032 (0.056)	-0.195 (0.077)	-0.129 (0.078)	-0.269 (0.068)			
Traditionalism	-0.091 (0.063)	0.615 (0.054)	-0.088(0.054)	0.101 (0.068)	-0.258 (0.058)	-0.399 (0.067)			
Egalitarianism	0.121 (0.017)	0.032 (0.024)	-0.153 (0.019)	-0.003 (0.099)	0.277 (0.021)	0.190 (0.019)			
Authoritarianism	-0.009 (0.065)	0.363 (0.063)	0.004 (0.059)	0.022 (0.084)	-0.317 (0.086)	-0.480 (0.080)			
Model 2 Party Family v Centre 2008 (Values and Left-Right)									
VALUES	Centre Left	Christian Democrat	Conservative	Nationalist	Communist	Green	AIC	BIC	DF
Individualism	-0.442 (0.054)	-0.065 (0.068)	0.357 (0.057)	-0.024 (0.054)	-0.589 (0.080)	-0.327 (0.072)	699992.421	700502.893	72
Conformity	0.085 (0.63)	-0.078 (0.068)	0.030 (0.075)	-0.121 (0.072)	-0.100 (0.081)	-0.263 (0.070)			
Traditionalism	-0.082 (0.064)	0.590 (0.057)	-0.078 (0.054)	0.081 (0.060)	-0.125 (0.077)	-0.296 (0.069)			
Egalitarianism	0.056 (0.015)	0.026 (0.017)	-0.109 (0.016)	0.010 (0.022)	0.170 (0.023)	0.144 (0.020)			
Authoritarianism	0.008(0.059)	0.260 (0.065)	-0.021 (0.062)	0.020 (0.089)	-0.130 (0.088)	-0.395 (0.081)			
Left-Right	-0.507 (0.024)	0.203 (0.023)	0.449 (0.023)	0.353 (0.032)	-0.873 (0.037)	-0.381 (0.029)			

Note: Standardised beta co-efficients reported. Figures in **bold** significant at the $p < 0.005$ level.

The multinomial model effectively highlights the dynamic of values based party choice between parties but it does not highlight the relevance of the overall values profile of a party as clearly. This study is primarily interested in exploring the overall distinctive values profile of parties within the political context of the overall party system. It is not being argued that political values are irrelevant to Centre Party voting. What is being contended is that the logistic framework highlights a political reality – which is that Centre parties lack an overall distinctive values profile that stands out in a crowded party system. By their very definition, Centre parties occupy a position in the political space that is positioned between more ideologically defined party families that have more distinctive political values appeals. A key part of the moderate appeal of Centre Parties to voters is that they sit in opposition to those more distinctive values profiles. It is therefore not surprising that the Multinomial models demonstrated that the importance of values to Centre Party voting is that they run in opposition to the main core political values profile of other mainstream parties that are highlighted in the logistic models. Ultimately the values measures in the logistic models are likely poor predictors of Centre Party vote because the relevance of values to Centre Party voting is relative to the values appeal of the mainstream Centre Left and Centre Right parties. It is important for a study that is focused on political context to capture that overall effect rather than concentrating on the relationship between party choices.

Catholic and Protestant country subsamples

There are 2 stages to the final part of the analysis. The aim is to test the extent to which there is geographical variation in the values-voting relationship. As this involves splitting data into Catholic and Protestant subsamples it is necessary to reintroduce the CFA measurement model to establish the viability of the measures in each of these samples. The second stage will then involve using these models to run the values measurement model, without controls, as has been done at the previous two stages of the analysis. As the primary interest is geographical variation, only the 2008 data was used.

Table 4.7 presents the two CFA models of the country type subsamples. It is not necessary to dwell long on these CFA models. The Catholic and Protestant models are similar in terms of quality of fit to the unified pooled models. However, there are some slight differences between them that highlight variation in the values model between country types. The Authoritarian indicators load differently, with Obedience representing the strongest indicator in the Protestant sample and a fairly weak indicator in the Catholic sample. This is consistent with the findings from the Country level CFA models from the previous chapter, which showed Catholic countries, such as Italy and Spain, recording lower factor loadings on the Obedience indicator. There also seem to be differences in the Conformity factors, with much stronger loadings for

the Catholic model. This provides further evidence of contextual variance in the values measures.

Table 4.7 CFA Subsample Area Models

<i>n</i>	Protestant <i>9912</i>	Catholic <i>10105</i>
<i>Traditionalism</i>		
TRAD1 Homosexuality	0.750	0.794
TRAD2 Abortion	0.749	0.671
TRAD8 Divorce	0.735	0.670
<i>Conformity</i>		
CON4 Soft Drugs	0.703	0.744
CON5 Avoid Tax	0.441	0.613
CON6 Avoid Fare	0.474	0.558
<i>Individualism</i>		
IND1 Responsibility	0.583	0.505
IND3 Competition	0.613	0.513
IND4 State vs Freedom	0.602	0.541
<i>Authoritarianism</i>		
AUTH3 Obedience	0.528	0.364
AUTH5 Independence	0.438	0.588
AUTH6 Imagination	0.394	0.541
<i>Factor Correlations</i>		
CONF with TRAD	0.460	0.554
AUTH with TRAD	0.699	0.440
CONF with INDIV	0.030	0.138
CONF with AUTH	0.306	0.326
<i>Modifications</i>		
AUTH3 with AUTH5	0.294	0.186
AUTH5 with AUTH6	-0.096	-0.124
AUTH6 with CON4	0.214	0.153
TRAD8 with TRAD2	0.296	0.296
CON6 with CON5	0.157	0.117
CON5 with CON4	-0.120	-0.368
<i>Fit Statistics</i>		
<i>x</i>² (<i>df</i>)	302.108 (24)	424.275 (27)
RMSEA	0.034	0.038
CFI	0.963	0.941
TLI	0.953	0.936

Note: Standardised loadings and correlations reported. Figures in **bold** significant at the $p < 0.005$ level.

Table 4.8 presents the area level SEM models. The subsamples present a subtle, and substantively interesting, picture of contextual variation in the values-voting relationship. The general overview of the models suggests that the core findings are very similar to that of the overall pooled model. In both the Protestant and Catholic models the direct values-voting relationship appears to be fairly strong. All of the values measures are significant predictors of vote choice for at least one party family type. There is also further evidence that the values measures account for more of the variance in the Centre Right vote than the Centre Left, while a greater range of values are relevant for the Centre Left vote. This is more evident in the Catholic than the Protestant sample. There appears some evidence that values account for a greater variance in vote choice in the Protestant models but a greater range of values are relevant in the Catholic models. However, much of this variation is driven by Traditionalism, which has a significant relationship with vote choice in all of the Catholic models but in only 4 of the Protestant models.

Traditionalism appears to represent the primary variation between the two models, which confirms the main contextual hypothesis. In the Protestant model there is evidence that differing emphasis on Traditionalism is relevant for its influence on mainstream Centre Left-Centre Right electoral division. There is a significant negative effect on the Centre Left vote at -0.166 but there appears no effect of Traditionalism on the Centre Right vote. In the Catholic models there is more evidence of Traditionalism representing a more uni-dimensional differentiator of the vote between Centre Right and Centre Left parties, with a significant positive co-efficient of 0.316 predicting the Centre Right vote making it the strongest values predictor in that model. In the Catholic model Traditionalism also behaves as a stronger predictor than Egalitarianism. This suggests that preferences regarding Traditional values are relevant to the left-right political divide in the Catholic sample. As with the pooled models, some of this variation can be explained by observing variation between the two Centre Right party families. In the Protestant sample Traditionalism appears to differentiate the vote between Christian Democrats and Conservative party family types: with a strong positive effect of 0.261 for Traditionalism on the Christian Democrat vote and a strong negative effect of -0.232 on the Conservative vote. In the Catholic sample, the effect of Traditionalism on vote choice is significant for both party families. The relationship between values and voting is similar for both parties in the Catholic sample, though the finding that Egalitarian values are not significant for Christian Democrat voters appears robust across all models.

Table 4.8 Party Family Vote Choice Models in 2008 Protestant and Catholic Country Subsamples

2008 Protestant	Centre Left	Centre Right	Centre	Nationalist	Communist	Green	Christian Democrat	Conservative
<i>N</i> = 9912	2192	2643	697	427	341	398	759	1884
Traditionalism	-0.166 (0.019)	-0.036 (0.023)	0.182 (0.026)	0.106 (0.080)	0.030 (0.041)	-0.006 (0.035)	0.261 (0.027)	-0.232 (0.023)
Individualism	-0.326 (0.015)	0.440 (0.015)	0.041 (0.021)	0.022 (0.020)	-0.271 (0.024)	-0.122 (0.025)	0.094 (0.019)	0.454 (0.016)
Authoritarianism	-0.018 (0.080)	0.209 (0.070)	-0.098 (0.075)	0.108 (0.080)	-0.357 (0.078)	-0.233 (0.091)	0.187 (0.052)	0.166 (0.063)
Conformity	0.106 (0.017)	0.071 (0.022)	0.003 (0.020)	-0.143 (0.026)	0.021 (0.030)	-0.146 (0.025)	0.008 (0.022)	0.097 (0.018)
Egalitarianism	0.176 (0.006)	-0.332 (0.006)	0.023 (0.009)	-0.115 (0.008)	0.358 (0.012)	0.226 (0.011)	0.038 (0.030)	-0.406 (0.007)
Chi Square (df)	827.722 (38)	827.429 (38)	804.726 (38)	906.9 (39)	815.76 (38)	823.497 (38)	859.059 (38)	820.043 (38)
RMSEA	0.046	0.046	0.046	0.048	0.046	0.046	0.047	0.046
r²	0.160	0.352	0.021	0.049	0.311	0.168	0.183	0.400
2008 Catholic	Centre Left	Centre Right	Centre	Nationalist	Communist	Green	Christian Democrat	Conservative
<i>N</i> = 10105	1878	2112	325	311	332	453	1102	1010
Traditionalism	-0.217 (0.013)	0.316 (0.012)	-0.129 (0.021)	0.170 (0.20)	-0.119 (0.019)	-0.217 (0.019)	0.317 (0.013)	0.135 (0.015)
Individualism	-0.225 (0.020)	0.309 (0.018)	0.106 (0.031)	0.180 (0.029)	-0.220 (0.030)	-0.052 (0.029)	0.142 (0.023)	0.308 (0.023)
Authoritarianism	0.104 (0.049)	-0.025 (0.061)	0.168 (0.068)	-0.149 (0.064)	-0.074 (0.095)	-0.283 (0.093)	-0.047 (0.070)	0.015 (0.070)
Conformity	0.148 (0.019)	-0.013 (0.019)	-0.058 (0.027)	-0.074 (0.029)	-0.086 (0.027)	0.024 (0.024)	-0.030 (0.021)	0.021 (0.023)
Egalitarianism	0.109 (0.006)	-0.154 (0.006)	-0.160 (0.011)	0.054 (0.009)	0.143 (0.010)	0.103 (0.019)	-0.008 (0.007)	-0.219 (0.007)
Chi Square (df)	596.778 (42)	614.478 (41)	586.762 (42)	596.396 (42)	579.375 (41)	586.564 (42)	632.6 (42)	597.55 (42)
RMSEA	0.037	0.038	0.036	0.037	0.037	0.036	0.038	0.037
r²	0.119	0.208	0.067	0.059	0.108	0.185	0.100	0.168

Note: Standardised beta co-efficients reported. Figures in **bold** significant at the $p < 0.005$ level.

Authoritarianism is another interesting case. In the Protestant model, Authoritarianism is a relatively strong positive predictor of the Centre Right vote with a coefficient of 0.209 , while there is no significant effect in the Centre Left Model. In the Catholic sample, this is reversed, with a significant positive effect of 0.104 for Authoritarianism on the Centre Left vote and no significant effect on the Centre Right vote. This suggests that what looked like a potentially anomalous finding in the pooled data above, regarding the connection between Authoritarianism and the Centre Left vote can be partially explained by variations in the relationship between the two subsamples.

Regarding the other party types, there is little difference between the samples when it comes to predicting the Communist vote. For both minor party groupings of the Left it is interesting that a negative association with Traditionalism significantly predicts vote choice in the Catholic sample but not in the Protestant one. This would seem to point to the dominance of Traditionalism as a key political value in Catholic countries. In Protestant countries the Traditionalism-voting relationship seems to function more in terms of differing emphasis.

Discussion

The analysis produced the following key findings related to the Research Questions:

1. Do the latent political values measures directly predict vote choice?

The most important finding, as far as the viability of the study is concerned, is that the values measurement model appears sufficiently robust at predicting vote choice. The findings generated with the model, while not original or substantively ground breaking, were logical and largely consistent with existing research and expectations regarding the underlying values structure of political preferences (Feldman, 1988; Caprara *et al.*, 2006; Leimgruber, 2011). Furthermore, these findings largely remained robust when broken down into subsamples, used in a multinomial framework and when applied to more than one time point. This suggests that the measurement model is capable of showing genuine, and relatively nuanced, associations between political values and voting rather than just representing noise in the analysis. The model was also sufficiently nuanced as to highlight differences in the values-voting relationship over time, demonstrate variation between the subsamples and between different party family types. All of these findings point to the values model being capable of addressing the core substantive research issues of this study. However, the findings also confounded some of the original theoretical expectations about the core model. The direct effect of the values predictors remained strong after the addition of controls, suggesting a stronger direct effect of

values on voting than had been hypothesised based on the prior literature (Knutsen, 1995b; Barnea and Schwartz, 1998). This is almost certainly the result of the political values measures that are being applied in this study, but it suggests that it will be necessary to reconsider the conceptualisation of values as being fully mediated by left-right identity. It is unlikely that anything close to full mediation will be observed given the predictive strength of the values measures as was demonstrated in the multinomial models in which the addition of left-right as a control had a clear impact but did not dampen the influence of values in all cases. In general this is a positive finding, as robust measures should allow for a more nuanced and comprehensive analysis of the influence of contextual influences on the values-voting relationship.

Hypothesis 1 - *There will be a direct effect between values and voting which establishes the viability of the values measurement model as a predictor of vote choice. This hypothesis was supported.*

The basic hypothesis related to the core political values underlying the left-right divide was proven correct in nearly all instances. Individualism and Egalitarianism did clearly differentiate the vote between left parties and right parties. Given the nature of the indicators that make up these measures this is not a surprising finding. Neither is it surprising that for other party families these values remained the most likely to predict vote choice in a coherent direction. However, an interesting and surprising caveat to this finding is that the Centre Right vote was not internally coherent on this measure. There was a strong effect on Individualism and Egalitarianism for the Conservative family type, but for the Christian Democrat party family Egalitarianism had no relationship with vote choice in some models. For other party families the effects of these two values measure were clear cut and consistent with expectations.

Hypothesis 2 - *There will be a stronger more consistent relationship between Individualism and Egalitarianism and vote choice than the other value dimensions as these most clearly map onto the long-standing left-right divide. This hypothesis was supported.*

2. Do political values influence vote choice through differentiation or emphasis?

There was evidence in the models that values can both differentiate vote choice in a uni-dimensional manner and highlight differences in the underlying emphasis of voters. Undoubtedly the more overtly political dimensions mentioned above play a larger role in differentiating vote choice along left-right dimensions. With parties identified as being on the left having a consistent positive association with Egalitarianism and a consistent negative association with Individualism, while the opposite is the case for parties of the right. The interesting partial exception to this is clearly the Christian Democrats as discussed above. There is also some evidence that the effect of Traditionalism varies according to the electoral context. In some cases Traditionalism differentiates the vote along left-right party divisions in a similar way to Individualism and Egalitarianism. In others it highlights the division between established parties and those representing 'New Politics' issues such as the Greens.

Hypothesis 3 - Individualism and Egalitarianism will be the main differentiators of vote choice among mainstream centre right and centre left parties according to known patterns of political competition. This hypothesis was supported.

The extent to which values emphasis plays an important role in structuring vote choice was more inconclusive. There is some evidence that value emphasis may be more important in highlighting variation in the underlying values structure of party families that are grouped together on the political spectrum. This makes theoretical sense, as division is likely to increase the more polarised a party system is (Sartori, 1976; Dalton and Anderson, 2010). The differing emphasis of values produced some very interesting findings regarding the Christian Democrat and Conservative vote. Christian Democrat voters clearly put a stronger emphasis on wider traditional values than Conservative voters and also showed far less aversion to Egalitarianism than Conservative voters. The findings related to Authoritarianism were contradictory: with Authoritarianism negatively or positively influencing the vote choice for specific party families at different time-points. This suggests that the influence of Authoritarianism on vote choice may be highly context dependent – although it did consistently negatively predict the Green vote. There is further evidence of a more coherent 'New Politics' values vote being represented in the relationship between values and the two fringe left party families: the Greens and Communists. This represents a difference of values emphasis from the main parties with regular negative association between Authoritarianism, Conformity and Traditionalism and voting for these party families. But this is not a clear-cut finding across all models. The one clear limitation regarding the viability of the measurement model is that the Conformity measure appears to

have limited predictive power. There was some evidence that it may be capable of highlighting a 'New Politics' cleavage and a general anti-system attitude because a negative association with Conformity consistently predicted both Communist and Nationalist party voting.

Hypothesis 4 - *The influence of Traditionalism, Conformity and Authoritarianism will be through varying emphasis rather than differentiation. There is partial support for this hypothesis.*

Hypothesis 5 - *Traditionalism, Conformity and Authoritarianism will prove more significant in predicting the vote of smaller party families. There is partial support for this hypothesis.*

3. Is there evidence of contextual variation in the values-voting relationship?

The subtle variation that exists between the Protestant and Catholic subsamples is clearly relevant to the wider study. The findings support the hypothesis that Traditionalism acts more as a uni-dimensional differentiator of vote choice in the Catholic than the Protestant sample. Traditionalism is a significant predictor of party choice in each of the party family models for the Catholic data. This suggests that values may structure a wider range of political divisions in the Catholic sample than the Protestant one. Furthermore, there appears to be a difference in the way in which Traditionalism structures the divide between party families in the two subsamples. In the Catholic sample Traditionalism is a significant and strong predictor in all models, suggesting that positions on Traditionalism (either positive or negative) are important to voters for all parties. However, for the Protestant sample it is more likely to be a matter of emphasis: with positions on Traditionalism (either positive or negative) being simply more important for the voters of some parties than others. In addition to the variation on Traditionalism, there is also evidence that Authoritarianism may have acted as a differentiator of the vote in Catholic countries but not in Protestant countries. These findings certainly suggest that there are different political contextual mechanisms at work that are rendering values relevant to vote choice.

Hypothesis 6 - *In the Protestant sub-sample Individualism and Egalitarianism will be unidimensional differentiators of vote choice between the main Centre Left and Centre Right party groups, whereas in the Catholic sample Traditionalism will also differentiate the vote in this way. This hypothesis was supported.*

Conclusion

This chapter demonstrates that political values can have a dual role in influencing vote choice. As might be expected, values can demonstrate directional differences in the values preferences of voters for different party families. But, they can also reflect variation in the emphasis of different values among voters for different party families. This nuance is particularly important in describing the motivation of voters in multi-party systems: in this case the European electorate. The values model used here has been able to demonstrate a number of important variations that raise larger questions for this analysis. For example, the subtle differences in values preferences of Christian Democrat and Conservative voters calls into question the extent to which they can be identified as a coherent centre-right electoral block on certain dimensions.

The headline findings in this chapter are potentially more in line with the nuances demonstrated in work related to the emotional drivers of vote choice. This approach considers the importance of both differentiation and emphasis in the underlying attachments of voters (Westen, 2007; Lakoff, 2009; Haidt, 2012). It potentially connects values work to 'emotional' theories of voting, in which voters are categorised as rationalising rather than rational. The extent to which this can be established is beyond the scope of this study but it does raise issues regarding the interpretation of the impact of values in multi-party environments. This connects more directly with the issues of priming and of context, which will be explored in subsequent chapters. There was substantial variation in the values emphasis of voters for party families that are often considered approximate to each other on the political spectrum: Christian Democrats and Conservatives, Greens and Communists, for example. This was not merely a function of socio-demographic characteristics. It would appear that voters for these parties have genuinely different value priorities that may explain the relative appeal of those parties. This provides some support for the theory of priming: certain parties are more effective at tapping certain values in the electorate (Verplanken and Holland, 2002). The key issue of interest here is whether voters can ultimately connect their values to that party preference directly or if they rely on an intermediate heuristic. In addition, the findings provided some initial evidence of contextual variation between the Protestant and Catholic subsamples suggesting that the contextual approach is justified. This is promising for the study's overall aim of examining the mechanisms through which voters convert political values into vote preferences.

Overall this chapter represents a significant advance in the study: it validates the measurement model, it provides evidence that values influence voting in a nuanced way and it has provided some initial evidence of contextual level variation. These findings clearly connect this study with the prior research in the core political values

field discussed in the literature review that has demonstrated similar direct relationships (McCann, 1997; Feldman, 2003; Jacoby, 2006). It has provided a first stage in analysing this relationship across multiple national contexts by applying the model in a cross-national pooled sample and a split sample by country type. Some of the findings can also potentially be linked with sections of the wider political psychology literature which explore the importance of emotional attachments to political preferences (Westen, 2007; Haidt, 2012). Bridging this gap between the emotional and social motivations of voting would appear to be an area of vote choice research in which values explanations can make a relevant contribution through the capacity to explore the micro-macro link (Hitlin and Piliavin, 2004; Aspelund, Lindeman and Verkasalo, 2013). Voters may have complex cognitive attachments to political parties but these attachments were not formed in a vacuum. They were formed in a specific set of social contexts and then primed by specific political contexts, such as the nature of party competition (Johnston *et al.*, 1998).

A substantial strand in the public opinion literature would argue that most voters do not possess the necessary political sophistication to consistently connect their often complex and contradictory value positions with coherent political preferences (Converse, 1964; Zaller, 1992; Jacoby, 2006; and see Marietta and Barker, 2007 for an alternative argument). The assumption is that voters require a simplifying organising heuristic, such as left-right identity or a religious affiliation, as a means of associating their values preferences with their political preferences. The main focus of the next stage of the analysis will be to explore the impact of that left-right pathway.

Chapter 5 The role of Left-Right identity in mediating the values-voting relationship

Introduction

This chapter builds on the findings in the previous chapter by introducing a further level of complexity into the models. It widens the scope of the study to consider the causal mediation mechanisms that may be responsible for variation in the values-voting relationship. Specifically, following on from previous research into individual values, it tests the influence of subjective political identity as a mediator of the values-voting relationship (Schwartz, Caprara and Vecchione, 2010; Vecchione *et al.*, 2013). It adds to this previous literature by considering the influence of political values in a cross-national context with the aim of applying insights from the Schwartz values literature to a core political values analysis.

The cognitive mechanism through which values influence vote choice is unlikely to be direct. The empirical assumption of a direct relationship is made by some researchers, either through theory or necessity due to data limitations (Van Deth and Scarbrough, 1995b; Marietta and Barker, 2007). But there are far more studies that assume an intermediate mechanism links values to political action and this approach appears more strongly rooted in overall values theories of social action (Caprara *et al.*, 2006). Despite the previous chapter establishing a stronger than expected relationship between values and voting, the study is assuming that even in their political form values still require some form of activation in order to become relevant to vote choice decision-making (Verplanken and Holland, 2002). It is likely that these mechanisms can apply to both the supply and demand side of the vote choice decision – and this study is primarily concerned with exploring that dynamic. The supply side aspect of this priming mechanism will be examined more closely in the next chapter that focuses on the influence of macro-level political context on the values-voting relationship. However, this chapter is more concerned with the cognitive choice mechanism that voters use at the individual level.

Political and social identities remain key decision making heuristics, not least because this is the lens through which popular political discussion takes place in the media and it is important to the way in which political elites position themselves to the electorate (Kriesi *et al.*, 2008; Piurko, Schwartz and Davidov, 2011; Raymond, 2011). The theory being tested in this chapter is that voters can meaningfully connect their values to parties through their sense of left-right identity (Caprara *et al.*, 2007, Aspelund, Lindeman and Verkasalo, 2013). This represents one key mechanism that renders

values relevant to voting and it relies on a relatively stable political system in which voters can make informed connections between their left-right identity and political parties (Feldman, 1988). Western Europe therefore provides a useful comparative base for testing these theories as it contains both a stable and recognisable conception of left-right and a substantial variation in party systems and political histories.

Figure 5.1 highlights the focus of this chapter on identifying whether political identity (as represented by subjective placement on the left-right scale) is a relevant mediating mechanism for values on voting and whether this varies for different values. Testing this will involve building on the approach of the previous chapter by extending the Structural Equation Framework to incorporate a full structural path model. The chapter will proceed by first outlining and justifying the key research questions that will be addressed related to the values structure of the left-right divide. It will assess the effectiveness of left-right as a mediator of the values-voting relationship and discuss whether this mechanism is likely to be subject to contextual variation. In outlining the research questions the chapter will also identify the contribution this analysis is aiming to make to the wider thesis and to the general literature on values. This will be followed by the model specification and descriptives. The main findings follow the pattern of analysis from the previous chapter. Firstly, the core SEM approach that adds left-right into the previous direct voting models as a mediator. These are path models that apply the mediation model to the vote of the 7 party families on the pooled 15 Country dataset at the 2008 and 1990 time-points. Secondly, area models will break the pooled dataset into Protestant and Catholic subsets based on Inglehart and Welzel's (2005) national values typology. The implications and limitations of these findings will then be discussed within the context of developing the broader argument of the thesis: that the values-voting relationship is defined by political context.

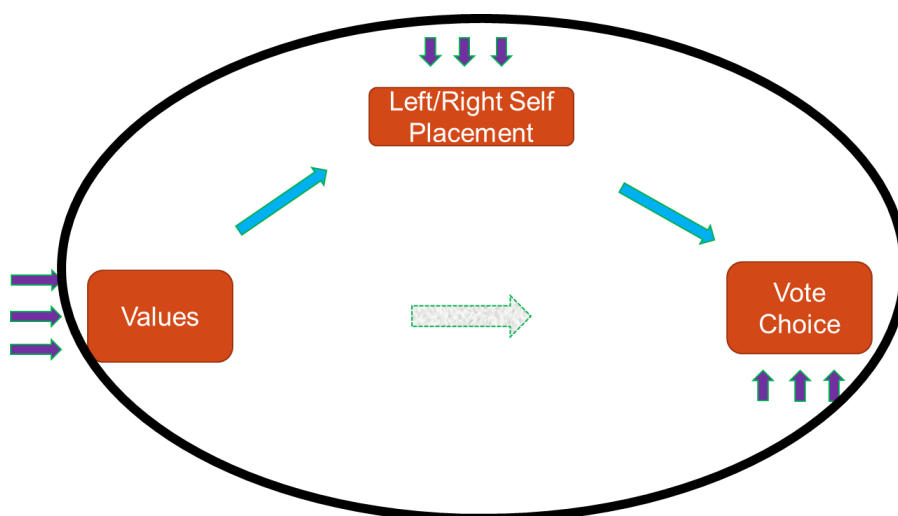


Figure 5.1 The full political identities mediation model

The chapter will demonstrate the following key findings:

1. *Left-right self-placement plays a key role in shaping how values are associated with vote choice; although it is a more varied influence than the full mediation theory that was originally proposed at the beginning of the thesis.*
2. *The role of left-right self-placement in priming the relationship between values and voting is complex, with both mediating and confounding effects exhibited. While there are few examples of the values-voting relationship being fully mediated by left-right, there is clear evidence of partial mediation with strong indirect effects in the models.*
3. *The role of left-right in mediating the values-voting relationship varies by value type. The more 'overtly' political values are partially mediated by left-right, the less overtly political values either have a direct or null relationship with vote choice.*
4. *The priming mechanism through which left-right influences the values-voting relationship clearly varies by party type and by socio-political context.*
5. *Specifically, there is strong evidence that the values model of the Conservative and Christian Democrat vote shows considerable variation. This is reflected both in terms of differences in the relationships between values and voting, and in the left-right mediation mechanism.*
6. *There is considerable variation demonstrated in the mediation mechanism between Protestant and Catholic country type subsamples. This provides solid empirical support for the main claim of the thesis: that both the values-voting relationship and the mechanisms through which values influence vote choice are influenced by the wider political context in which voters make their choices.*
7. *Findings regarding the stability of the left-right mechanism over time are shown to be inconclusive. The mediation structure is shown to be generally stable, though subject to the expected influence of value change on the Traditionalism indicator (consistent with prior research). However, the models for the older time-point (1990) are a noticeably poorer fit for the data.*

Research Questions

The Schwartz values literature has produced work that demonstrates a 3 stage path model from Individual Values to Political Values to Vote Choice (Caprara *et al.*, 2007). The intention here is to add to this model further by arguing that political values still require a decision making heuristic in order to be rendered relevant to vote choice (Leimgruber, 2011). Voters require a cue that primes their values and connects this with a specific party choice (Verplanken and Holland, 2002). In most Western democracies these messages are likely to come from the embedded nature of the left-right heuristic within political culture. Parties do prime values directly, but they often do so by attempting to influence the content of ideological political division (Kitschelt and Hellemans, 1990; Goren, 2005; Goren, Federico and Kittilson, 2009). Therefore, the key decision making heuristic remains left-right but political culture can influence which values voters associate with left-right at any given time, in any given electoral context. The key argument that is being proposed is that not all values are likely to be in play at all times. It is also just as important to demonstrate that some values are negatively in play depending on the political context in which the vote choice decision is made, as this reflects the reality of modern political division.

Main Research Question - *What role does political identity have in mediating the influence of individual values on voter choice decisions?*

There are many possible mediators of the relationship between individual values and voting. In socio-psychological studies that have focused on analysing the cognitive chain of decision-making, the association between values, attitudes and issues has a long academic tradition (Converse, 1964; Rokeach, 1973; Schwartz, 1992). This is broadly connected to the much more extensive psychological literature on social action theory (Parsons, 1949; Giddens, 1979). However, within the literature focused on socialisation influences there has been an increasing attention given to the relationship between values and socio-political identities and demographic factors (Alvarez and Brehm, 2002; Tilley, 2002, 2005). There is an existing body of research that addresses the association between individual values and political identity, whether represented as subjective placement on a left-right scale (Purko, Schwartz and Davidov, 2011) or through exploring the relationship between values and party identification (Goren, Federico and Kittilson, 2009). In both cases there is convincing evidence of an endogenous relationship between values and political identity –the one plays a major role in constraining the other. The argument that is being advanced here, based on prior research using the Schwartz individual values scale, is that left-right will mediate the relationship between political values and voting (See *Figure 5.1*). However, it should be acknowledged that the previous two chapters have demonstrated that the measures being used in this analysis are neither as universal

nor as abstract as the Schwartz values. Crucially, they are more overtly 'political' than the Universal human values structure that is defined in that literature. The analysis of the direct values-voting relationship in *Chapter 4* demonstrated that the values measures in the model were much stronger predictors of vote choice than was anticipated. It is therefore expected that this further analysis will demonstrate greater evidence of partial mediation than full mediation.

Hypothesis 1 - *The relationship between the values measures and voting is partially mediated by left-right political identity.*

Sub-questions

Is there variation in the mediation mechanism between different values measures?

The previous chapter highlighted considerable variation in the strength of the relationship between separate values measures and vote choice. While the claim is made that all 5 values represent 'political' values and there are prior studies supporting a relationship between these values and voting preferences, no claim is made that these values represent all possible political values or that they are equally important to voting preferences. It is clear that the measures for Individualism and Egalitarianism map directly onto the historic political cleavages in a much clearer way than Authoritarianism and Conformity do; this has been shown in previous research from a wide range of different values indicators (Rokeach, 1973; Feldman, 1988; Piurko, Schwartz and Davidov, 2011). Traditionalism is likely to fit somewhere in between – according to cleavage theories of politics in some contexts Traditionalism may be a proxy for a religious political cleavage that maps onto a left-right political structure but in some contexts it will not (Lipset and Rokkan, 1967; Raymond, 2011). Therefore, it is important to develop some specific hypotheses based on expectations regarding how different values are likely to be mediated by left-right subjective identity. In this case, a distinction is being made between the more 'overt' political values of Individualism and Egalitarianism and the other values in the model based on the findings in the previous chapter.

Hypothesis 2 - *Where a party preference is clearly identified as a left or right orientated party, Individualism and Egalitarianism will be mediated by left-right self-placement.*

Hypothesis 3 - Where a party preference is clearly identified by its religious affiliation (for example, Christian Democrat party family) Traditionalism will be a direct predictor of vote choice and will not be mediated by left-right identity.

Hypothesis 4 - The effect of Authoritarianism and Conformity will be mediated by left-right identity but only for fringe party families (for example, Green, Nationalist, Communist).

The justification for *Hypothesis 4* is based on the findings of the previous chapter, which suggested that there is a consistent significant negative relationship between Authoritarianism, Conformity and vote choice for all of the above fringe party families. This suggests that these values may be capturing a general anti-establishment 'new politics' sentiment among voters for non-mainstream parties.

Does the mediating mechanism remain stable over time or is it subject to the effects of value change?

Previous studies suggest that there are two competing theories that could apply here. General theories on values argue that they are relatively stable constructs whose relationship to political attitudes, objects and behaviours remains static over time (Inglehart, 1971; Rokeach, 1973; Schwartz, 1992; Hitlin and Piliavin, 2004). However, research that has focused specifically on political values has often suggested that the relationship between party choice and values is subject to change, partly because of value change but mainly because parties can move both their own position and the political values of their voters (Van Deth and Scarbrough, 1995b; Goren, 2005; Goren, Federico and Kittilson, 2009; Surridge, 2012). As the values measures used here represent a range of values it is wrong to state a unifying theory that applies to all values but, based on the relative stability of the models run in the previous 2 chapters it seems likely that the mechanism will exhibit stability.

Hypothesis 5 - The left-right mediation mechanism linking values and voting will remain stable at the 1990 and 2008 time-points.

Does the mediation influence of left-right vary by political context?

The previous chapter has already highlighted broad variation in the values-voting relationship by context. It is equally important to the overall theory of the thesis to be able to test if contextual variation applies to the mediating mechanism as well. It is likely that the political context strongly influences the extent to which specific values are primed through their association with the left-right positioning of parties

(Aspelund, Lindeman and Verkasalo, 2013). Values can play an important role in demonstrating the interaction between political culture, political socialisation and party positioning in defining political outcomes. This can add to the existing literature on the influence of political context (Kriesi *et al.*, 2008; Dalton and Anderson 2010). The overall theory that this connects to is that political socialisation defines the political values that are likely to be relevant to individual voters (Inglehart, 1971; Rokeach, 1973); political heuristics such as left-right identity then play a vital role in priming those values in relation to political choice. *Chapter 4* highlighted clear variations in the direct relationship between values and voting in the Protestant and Catholic country subsample. A similar modelling strategy will be applied here allowing the following hypothesis to be tested.

Hypothesis 6 - *Based on previous research on long-standing political cleavages (Raymond, 2011) Traditionalist values will be mediated by left-right identity in Catholic countries. However, in Protestant countries, the relationship between Traditionalism and vote choice will be direct as it does not represent such a long-standing division.*

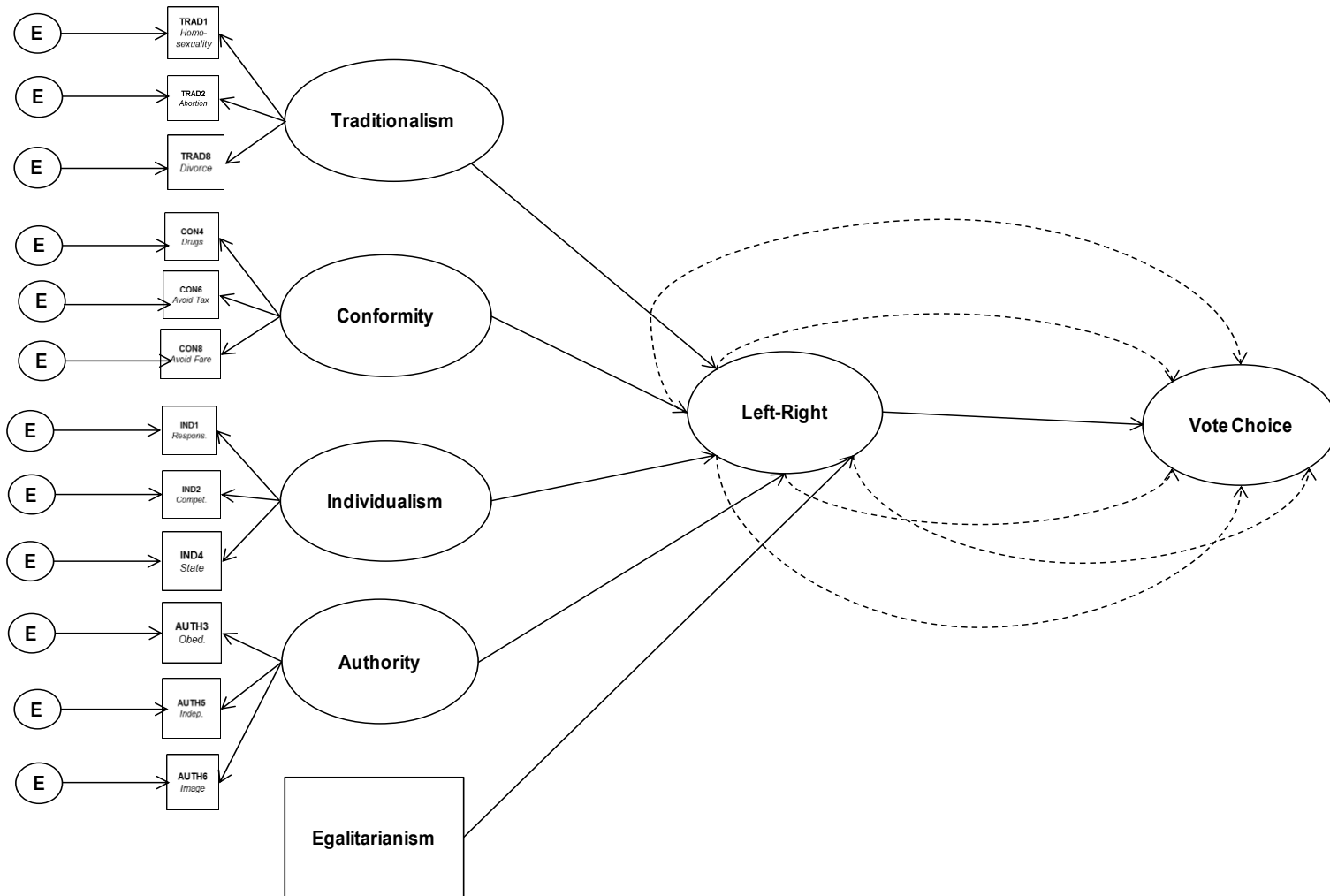
Model Specification

The analysis is applying a Structural Equation Modelling approach to estimating the mediation pathway between values and voting. The core model is set out in *Figure 5.2*. It proceeds by out a basic SEM path model as specified by MacKinnon, Fairchild and Fritz (2007). There is a clear distinction made between the measurement stage and the structural stage of the model. The measurement stage is defined as the 4 values CFA model identified in *Chapter 3* with the addition of the single item indicator for Egalitarianism. The measurement model therefore consists of 5 factors and represents the values measures as the primary predictors in the model. Left-Right is included in the model as the mediator. Therefore, the first part of the structural modelling is to establish the viability of the mediator and to establish a significant relationship between the primary predictor and the mediator (Baron and Kenny, 1986). A direct pathway is therefore estimated between each of the factors in the measurement model and left-right. The second part of the structural stage establishes the direct relationship between the primary predictors (values) and the dependent variable (party family vote choice). The direct pathway between each value and vote choice is therefore estimated. The third part of the structural stage involves establishing a significant relationship between the mediator (left-right identity) and the dependent variable (party family vote choice). Finally, the mediated indirect influence of the predictor (values) on the dependent variable (vote choice) via the influence of the mediator (left-right identity) is established. This involves estimating the indirect pathway through which values influence vote choice via left-

right identity. This is consistent with the Baron and Kenny (1986) and MacKinnon, Fairchild and Fritz (2007) basic requirements of mediation modelling. It follows in the tradition of SEM modelling using latent values outlined in the work of Davidov *et al.* (2011) in making the distinction between the measurement model and the structural model. While there are a large number of latent predictors the Structural Model itself is a single mediation model in which left-right is the only mediation pathway estimated (MacKinnon, Fairchild and Fritz, 2007). Factors are constrained as outlined in *Chapter 3*. As is standard in SEM modelling, controls are not included in the model and only relevant mediation pathways are estimated in order to keep the analysis parsimonious and to reduce the risk of over specification. This is consistent with the approach of Davidov (Davidov *et al.*, 2008). The previous chapter demonstrated that the relationship between values and voting remained valid with the introduction of known socio-demographic controls. The aim is to test a potential structural pathway between values and voting. No claim is being made for the overall influence of values on voting relative to other factors: just for the influence that left-right has in structuring the way in which individuals connect their values with their preferences.

Stage 1 of the analysis develops a full SEM pathway model of the relationship between values and voting choice. The analysis retains the binary logistic framework for the reasons laid out in the model specification in *Chapter 4*. It introduces left-right subjective self-placement as a mediator in this analysis (*see Figure 5.2*). This tests the key research question of whether subjective political identity mediates the influence of the values measures on vote choice. It is important that these models demonstrate that they are capable of highlighting the path between values and voting, so a more robust strategy will be used than in previous models. The sample for modelling the vote of each party family will be defined by the countries that include a party from that family. In other words, countries in which Green parties do not exist will not be included in the Green Party pooled model. This removes the 'false choice' problem and should produce a more accurate measure of vote choice. So while Centre Left and Centre Right vote are modelled across the whole pooled sample, other parties are modelled on reduced samples. While this slightly reduces the scope of comparability it increases the potential accuracy of the path model; as the primary aim of this stage of the analysis is in testing the viability and variability that exists in the mediation mechanism this was considered a necessary compromise. The aim of this analysis is to demonstrate a possible mechanism through which values influence vote choice; setting the model up in this way makes it more likely that it can demonstrate these pathways. This same model will be applied to the 1990 data to highlight any changes that may have taken place in the values-voting mechanism over time and to establish whether the model is robust across different waves of the EVS.

Figure 5.2 Diagram of Full Structural Model²⁵



²⁵ Structure and Form taken from Mackinnon, Fairchild and Fritz (2007).

Stage 2 of the analysis follows *Chapter 4* in looking for evidence of contextual variation in the values-voting mechanism by splitting the dataset into two segments: Catholic and Protestant²⁶. This is based on the Inglehart and Welzel (2005) country typology developed from variables in the World Values Survey. This will enable an exploration of variation in the values-voting relationship and allow the theory related to the contextual relevance of values to be tested. Stage 2 therefore takes a similar approach to Stage 1 but applies the left-right mediator model to the two subsamples in the dataset. In order to render the results more easily interpretable, maintain sufficient sample size in the dependent variable and make the analysis more manageable, Stage 2 restricts the number of dependent variables modelled to 4. Voting for the main Centre Left and Centre Right party groupings are modelled along with the 2 constituent parts of the Centre Right party family (Christian Democrats and Conservatives). These choices reflect the substantive relevance that has been shown by the variation in the values model between these groups in previous analysis.

All models are run in *Mplus* using a WSLMV estimator and bootstrapping is applied.

²⁶ Seven Catholic Countries: Austria, Belgium, France, Ireland, Italy, Portugal, Spain. Eight Protestant Countries: Denmark, Finland, Germany/West Germany, Iceland, Netherlands, Norway, Sweden, United Kingdom.

Descriptives

For a discussion of the descriptive data of the measurement model please see the descriptive data section of *Chapter 3*. See *Table 5.1* for description of the party family data that make up the dependent variables in the analysis. For a list of countries that have been excluded from the analysis for each of the specific party family variables (for example UK contains no Christian Democrat party so is not included in the model of Christian Democrat vote as that would be acknowledging a 'false choice') please see *Appendix 9*. The overall *n* of each party family model is recorded in brackets.

Table 5.1 Party Family descriptives

2008 PARTY FAMILY DESCRIPTIVES				
Party Family	Pooled Data		Protestant	Catholic
<i>n</i>	<i>20017</i>		<i>9912</i>	<i>10105</i>
	<i>n</i>	Sample		
Social Democrat/Centre Left	4070	(20017)	2192	1878
Centre Right	4755	(20017)	2643	2112
Centre/Liberal	1022	(14441)	697	325
Nationalist	738	(11324)	427	311
Communist/Left Party	673	(12376)	341	332
Green	851	(12040)	398	453
Christian Democrats	1861	(13506)	759	1102
Conservative	2894	(14383)	1884	1010

1990 PARTY FAMILY DESCRIPTIVES				
Party Family	Pooled Data			
<i>n</i>	<i>19201</i>			
	<i>n</i>	Sample		
Social Democrat/Centre Left	4224	(19201)		
Centre Right	4900	(19201)		
Centre/Liberal	1367	(14935)		
Nationalist	570	(11487)		
Communist/Left Party	763	(9619)		
Green	999	(17146)		
Christian Democrats	2783	(14350)		
Conservative	2159	(10884)		

On each occasion the party family measure is defined as a binary variable with 1 indicating an intention to vote for that party and 0 if the respondent plans to vote for someone else, abstains from voting or is unsure of their preference. The overall Centre Right vote is made up of the combined *n* of those who intend to vote for the Christian Democrat and Conservative party family types.

Left-Right is measured on a 10-point scale running from 0 = Furthest Left to 10 = Furthest Right. Respondents are asked to state where on this scale they place their own political views. In the 2008 data, 2028 out of the 20017 respondents either did not know or refused to answer. In 1990 this was 3205 out of 19201. This will be treated as missing data in the analysis and accounted for by the FIML method that is applied in the *Mplus* estimation procedure. Left-Right is normally distributed in both samples, with a mean of 4.27 (SD = 3.22) in 1990 and 4.32 (3.02) in 2008 (see table 4.2). This suggests that the variable retains similar qualities at both time points, which lends some general support to the idea that left-right is a stabilising political heuristic in West European democracies.

Results

Stage 1 – Pooled Models

Stage 1 provides the first test of the mechanism theory of the values-voting relationship by introducing Left-Right self-placement as a mediating variable in an SEM pathway model. This tests the viability of the theory that values influence the political preferences of voters through left-right operating as a choice heuristic that enables voters to associate their values preferences to a specific party. *Table 5.2* presents the findings from the model which was run using the 2008 EVS wave. The table shows that the overall fit of the SEM models to the data is generally good. There is some confidence that the results in these models represent fairly robust findings. There is no issue regarding the relationship between Left-Right and vote choice – it is strongly significant in 7 out of the 8 models. It remains weakly significant in the 8th (Centre party) and there are sound reasons why the relationship between left-right and Centre party voting would be relatively weak, so it is not a cause for concern. Therefore the basic test of establishing a significant relationship between the mediator and the dependent variable has been passed (Baron and Kenny, 1986).

Table 5.2 2008 Mediation Model highlighting direct and indirect effects

2008 Pooled									
Total, direct and indirect effects	Centre Left	Centre Right	Centre	Nationalist	Communist	Green	Chris Democrat	Conservative	
<i>n</i>	<i>4070 (20017)</i>	<i>4755 (20017)</i>	<i>1022 (14441)</i>	<i>738 (11324)</i>	<i>673 (12376)</i>	<i>851 (12040)</i>	<i>1861 (13506)</i>	<i>2894 (14383)</i>	
Total effect of TRADIT	-0.217 (0.011)	0.154 (0.011)	0.135 (0.036)	0.27 (0.017)	-0.100 (0.018)	-0.065 (0.036)	0.272 (0.013)	0.003 (0.012)	
Total Indirect effect via L/R	-0.070 (0.003)	0.075 (0.003)	0.002 (0.004)	0.046 (0.002)	-0.078 (0.003)	-0.033 (0.002)	0.056 (0.002)	0.044 (0.003)	
Direct effect of Tradit	-0.147 (0.010)	0.079 (0.010)	0.133 (0.015)	0.224 (0.017)	-0.023 (0.018)	-0.032 (0.018)	0.216 (0.013)	-0.041 (0.025)	
Total effect of INDIV	-0.306 (0.012)	0.398 (0.012)	0.090 (0.018)	0.218 (0.017)	-0.308 (0.018)	-0.142 (0.018)	0.098 (0.014)	0.487 (0.013)	
Total Indirect effect via L/R	-0.145 (0.004)	0.157 (0.004)	0.008 (0.006)	0.101 (0.006)	-0.185 (0.006)	-0.064 (0.006)	0.091 (0.005)	0.146 (0.004)	
Direct effect of Indiv	-0.160 (0.012)	0.241 (0.012)	0.082 (0.020)	0.117 (0.019)	-0.123 (0.020)	-0.078 (0.020)	0.007 (0.016)	0.341 (0.013)	
Total effect of AUTH	0.066 (0.020)	0.027 (0.060)	-0.071 (0.084)	-0.171 (0.080)	-0.090 (0.035)	-0.343 (0.103)	0.097 (0.041)	-0.079 (0.065)	
Total Indirect effect via L/R	-0.012 (0.017)	0.013 (0.018)	0.002 (0.002)	0.014 (0.004)	0.004 (0.018)	-0.006 (0.007)	0.001 (0.009)	0.023 (0.018)	
Direct effect of AUTH	0.078 (0.059)	0.013 (0.056)	-0.072 (0.084)	-0.171 (0.080)	-0.094 (0.020)	-0.336 (0.103)	0.097 (0.042)	-0.102 (0.062)	
Total effect of CONFORM	0.126 (0.012)	0.05 (0.011)	-0.032 (0.024)	-0.099 (0.018)	-0.088 (0.018)	-0.070 (0.016)	0.027 (0.015)	0.071 (0.013)	
Total Indirect effect via L/R	-0.001 (0.003)	0.002 (0.003)	0.001 (0.010)	0.007 (0.005)	-0.011 (0.009)	0.002 (0.002)	-0.004 (0.003)	0.011 (0.012)	
Direct effect of Conform	0.128 (0.011)	0.048 (0.011)	-0.033 (0.024)	-0.106 (0.017)	-0.076 (0.018)	-0.072 (0.016)	0.031 (0.017)	0.060 (0.012)	
Total effect of EGA	0.055 (0.005)	-0.099 (0.004)	-0.016 (0.009)	-0.011 (0.007)	0.094 (0.007)	0.049 (0.007)	-0.008 (0.005)	-0.304 (0.005)	
Total Indirect effect via L/R	0.041 (0.002)	-0.044 (0.002)	-0.007 (0.004)	-0.083 (0.002)	0.047 (0.002)	0.018 (0.002)	-0.023 (0.002)	-0.120 (0.002)	
Direct effect of EGA	0.014 (0.004)	-0.054 (0.004)	-0.009 (0.007)	0.072 (0.006)	0.048 (0.007)	0.030 (0.007)	0.015 (0.004)	-0.184 (0.005)	
Direct effect of L/R	-0.429 (0.005)	0.454 (0.005)	0.022 (0.012)	0.297 (0.010)	-0.481 (0.010)	-0.199 (0.011)	0.289 (0.014)	0.431 (0.021)	
RMSEA/CFI	0.032/0.961	0.032/0.957	0.044/0.927	0.044/0.914	0.033/0.951	0.031/0.955	0.034/0.946	0.036/0.947	
<i>r</i> ²	0.279	0.416	0.017	0.15	0.376	0.24	0.203	0.485	
Direct Values on LR									
Traditionalism	0.161	*	0.093	0.156	0.156	0.164	0.194	0.102	
Individualism	0.335	*	0.342	0.341	0.373	0.32	0.314	0.338	
Authoritarianism	0.027	*	0.071	0.049	-0.007	0.032	0.002	0.054	
Conformity	0.003	*	0.04	0.023	0.023	-0.008	-0.015	0.026	
Egalitarianism	0.037	*	-0.009	0.072	0.122	0.078	-0.207	-0.184	

Note: Standardised beta co-efficients reported. Figures in **bold** significant at the $p < 0.005$ level.

The main problem regarding model fit arises in the variability of the values measures in predicting Left-Right. As stated above, with the exception of Centre Left and Centre Right, the pooled samples vary by party family as reflected in the variation in the overall n in each model. This has produced an unexpected variability in whether values measures predict Left-Right. In the Centre Left and Centre Right model (using the whole sample) Traditionalism, Individualism and Egalitarianism have a significant direct relationship to Left-Right but Authoritarianism and Conformity do not. While this does have some implications to the overall mediation theory that is being tested here, it is not altogether surprising: Individualism and Egalitarianism (the more directly 'political values' in the model) have a clearly defined theoretical relationship to Left-Right. Likewise, Traditionalism can be considered to map onto the existing Left-Right political division as a long-standing societal cleavage in Western democracies. It is less clear how Authoritarianism and Conformity may interact with left-right identity and it is likely that where there is a relationship this is related to specific electoral context (Barnea and Schwartz, 1998).

There is no evidence in these models that left-right fully mediates the relationship between values and voting. However, there is some clear evidence of partial mediation and it is also clear that the mediation influence of left-right can explain important aspects of the values-voting relationship. As regards differentiating the vote between Centre Right and Centre Left (the only models on which we can make such a comparison as they are based on the same sample), what is observed is that on the 3 values that significantly predict left-right (Traditionalism, Individualism, Egalitarianism) there are both significant direct and indirect effects. Variation in the strength of these effects suggests that values connect to party choice in different ways for different parties. The findings are consistent with those of previous studies: there is a significant positive relationship between Individualism and Traditionalism and the Centre Right vote and a negative one for Egalitarianism – these findings are reversed for the Centre Left vote. This model contributes to the understanding of these relationships by demonstrating the extent to which the indirect, mediated, effect adds to this overall variance compared with the direct effect (*see Table 5.3*). Half the variance of Traditionalism in the Centre Right vote is accounted for by an indirect effect via left-right. While for the Centre Left, the direct effect is much stronger accounting for two thirds of the effect of Traditionalism. On Egalitarianism the indirect effect of Left-Right comes close to fully mediating the relationship between values and vote for the Centre Left, while for the Centre Right the direct effect remains strong. On Individualism there is again a slight difference: with the indirect effect of Left-Right accounting for nearly 50% of the overall effect of Individualism on vote choice, while the direct effect of Individualism on the Centre Right is stronger than the indirect effect.

Table 5.3 The percentage of the variance accounted for by direct and indirect effects for each value (Centre Left and Centre Right Party Families)

VALUE	Centre Left		Centre Right	
	% Direct Variance	% Indirect Variance via L/R	% Direct Variance	% Indirect Variance via L/R
Traditionalism	67.74	32.26	51.30	48.70
Individualism	52.61	47.39	60.55	39.45
Egalitarianism	25.45	74.55	54.55	45.45

Splitting the Centre-Right vote into its Christian Democrat and Conservative variants further illustrates key variations in the values structure of their voters; this leads to some doubts regarding the validity of the findings on the Centre Right vote in relation to Traditionalism. The Christian Democrat model mimics the structure that is observed in the overall Centre Right model: with significant direct and indirect effects but with the direct influence of Traditionalism being stronger than the mediated influence. This should be expected: voters are likely to be able to directly associate the Christian Democrats with Traditional values without relying on a left-right heuristic. However, with the Conservative vote the structure of this relationship is completely different (*see Figure 5.3*). There is evidence of a confounding effect in the role of left-right on the Conservative vote. The direct relationship between Traditionalism and the Conservative vote is -0.041 with a P value of 0.079 , so therefore not shown as statistically significant in the table (although it is close to significance and substantively relevant). The indirect effect is both positive and significant at 0.044 . Therefore Traditionalism is positively associated with Conservative voting but only when voters link it with their right of centre preferences. If they do not, then there is some evidence that the direct relationship between Traditionalism and vote choice taps into the libertarian strand in Conservative party voting. It requires identification with a right of centre position to render the relationship positive. This shows that there are competing forces on this dimension among Conservative electorates. The reality may be that there are conflicting motivations among Conservative party voters that cancel each other out but are just as important.

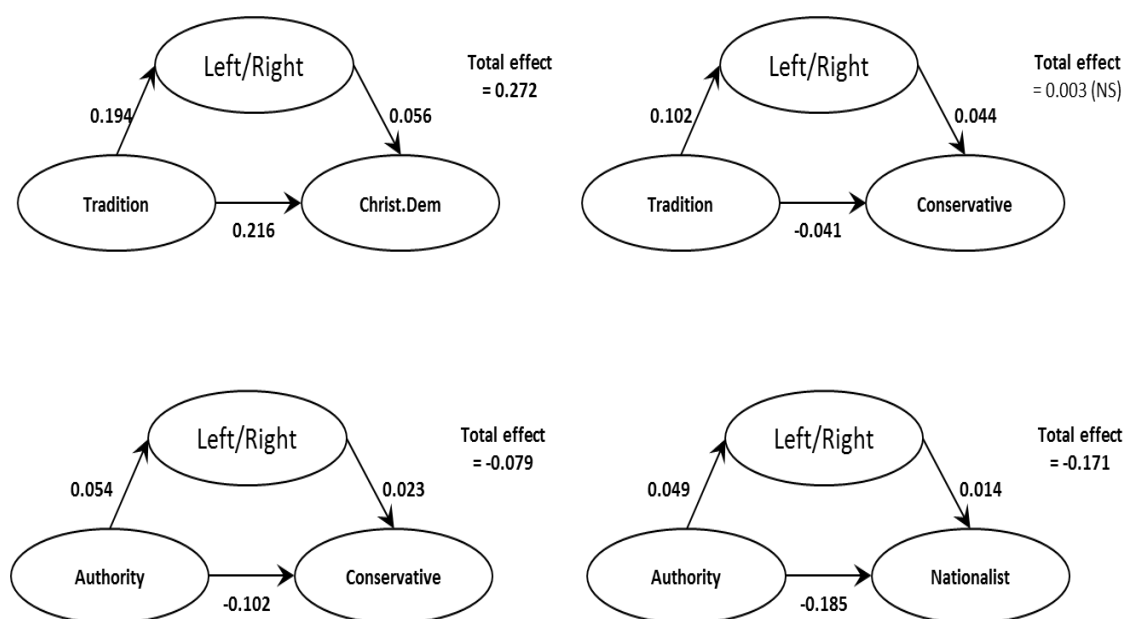


Figure 5.3 Diagram of Mediation Structures showing confounding effects of left-right for right of Centre party families.

A similar effect can be observed for the influence of Authoritarianism on the Conservative vote (this is a valid observation as there is a significant relationship between Authoritarian values and left-right in the Conservative sample). In this instance, there is a significant negative relationship in the direct effect between Authoritarianism and the Conservative vote but the effect is positive when mediated by left-right identity. This pattern is also found in the Nationalist party model (although the Nationalist vote mimics the Christian Democrats on the Traditionalism indicator). The fact that there is a similar structure in the relationship between Authoritarianism and voting for these two right of centre party families suggests that this is a robust finding. When voters perceive a party as right of centre they can make an association to their Authoritarian instincts, but the direct positive association may appeal to broader libertarian associations.

There is some evidence that the significant negative relationship between Traditionalism and the Communist vote is mediated by voters positioning themselves on the Left of the political spectrum; the indirect effect accounts for nearly all the variance in the total effect. The model for the Centre party confirms that values have contributed little to an understanding of vote choice for centre parties –the model is set up in such a way as to almost make this inevitable. Likewise the model of Green Party vote at the pooled level adds little to the understanding of the relationship between values and Green party voting compared with the direct models used in previous analysis. There is some evidence that, as with the Communist vote model,

the effect of Traditionalism is mediated through left-right but this is speculative as the total effect does not show a significant association with the Green Vote. With that exception, the values structure of the Green vote on the other two relevant mediators (Egalitarianism and Individualism) is largely the same as for the Centre Left vote.

Table 5.4 presents the final part of this stage of the modelling. The same models are applied to the 1990 wave of the EVS to test whether the values structures have remained robust overtime. Firstly, 4 out of the 5 values significantly predict left-right self-placement in 7 out of the 8 models. Even Conformity significantly predicts left-right self-placement in the key Centre Right and Centre Left vote models. Therefore more values are relevant in these 1990 models than in 2008. There is not very much variation in the differences in the core relationship between Centre Right and Centre Left voting on Traditionalism, Individualism and Egalitarianism between 2008 and 1990. However, there is evidence of indirect effects on vote choice for both Conformity and Authoritarianism. On the Centre Left vote it is clear that there is a confounding effect in the relationship: there is a positive direct effect between Authoritarianism and Centre Left voting but when seen through a left-right prism it becomes a negative effect. This is logical and suggests that the positive effects that are consistently found between Authoritarianism and Centre Left voting may say more about the values of key Centre Left voting groups: for example, working class voters are more likely to express Authoritarian attitudes (Thorisdottir *et al.*, 2007).

Generally there are much stronger relationships between values and voting, both direct and indirect, across all party families in the 1990 models. The Centre party values model is so completely different that it is possible it reflects a misclassification of certain Centre parties. Nevertheless, there is some evidence of a confounding effect on Traditionalism which would be consistent with expectations: that there is a significant negative effect in the direct relationship between Traditionalism and Centre party vote but when mediated by left-right this becomes positive (*see Figure 5.4*). So if a Centre party is identified as right of Centre by voters it primes their Traditional values. As this finding did not hold in the 2008 data then it must be treated with caution, though it may also represent some evidence of value change. Where value change is clearly evident is in the differences in the Conservative vote profile.

Table 5.4 1990 Mediation Model Highlighting Direct and Indirect effects

1990 Pooled	Centre Left		Centre Right		Centre		Nationalist		Communist		Green		Chris Democrat		Conservative	
Total, direct and indirect effects	4224 (19201)		4900 (19201)		1367 (14935)		570 (11487)		763 (9619)		999 (17146)		2783 (14350)		2159 (10884)	
n																
Total effect of TRADIT	-0.207 (0.054)	0.376 (0.012)	-0.195 (0.017)	0.012 (0.024)	-0.269 (0.018)	-0.173 (0.016)	0.422 (0.013)	0.077 (0.015)								
Total Indirect effect via L/R	-0.082 (0.012)	0.094 (0.003)	0.026 (0.003)	0.069 (0.003)	-0.140 (0.004)	-0.030 (0.003)	0.104 (0.002)	0.094 (0.004)								
Direct effect of Tradit	-0.125 (0.053)	0.282 (0.011)	-0.221 (0.018)	-0.057 (0.028)	-0.128 (0.018)	-0.143 (0.017)	0.318 (0.013)	-0.118 (0.015)								
Total effect of INDIV	-0.239 (0.011)	0.278 (0.011)	0.170 (0.016)	0.256 (0.019)	-0.335 (0.015)	-0.059 (0.015)	0.171 (0.011)	0.332 (0.013)								
Total Indirect effect via L/R	-0.092 (0.003)	0.107 (0.003)	0.036 (0.005)	0.066 (0.005)	-0.170 (0.005)	-0.033 (0.004)	0.089 (0.003)	0.122 (0.004)								
Direct effect of Indiv	-0.147 (0.011)	0.171 (0.011)	0.134 (0.017)	0.190 (0.021)	-0.165 (0.016)	-0.026 (0.012)	0.081 (0.012)	0.210 (0.014)								
Total effect of AUTH	0.061 (0.021)	0.028 (0.050)	0.043 (0.074)	0.061 (0.053)	-0.255 (0.088)	-0.216 (0.082)	0.033 (0.052)	-0.042 (0.063)								
Total Indirect effect via L/R	-0.016 (0.006)	0.020 (0.009)	0.005 (0.001)	-0.010 (0.004)	-0.016 (0.017)	-0.006 (0.002)	0.017 (0.007)	-0.022 (0.015)								
Direct effect of AUTH	0.077 (0.020)	0.008 (0.047)	0.038 (0.074)	0.071 (0.053)	-0.239 (0.085)	-0.210 (0.082)	0.017 (0.051)	-0.020 (0.061)								
Total effect of CONFORM	0.191 (0.021)	-0.043 (0.019)	0.063 (0.029)	-0.063 (0.038)	0.082 (0.028)	-0.101 (0.023)	-0.028 (0.022)	0.084 (0.026)								
Total Indirect effect via L/R	0.009 (0.004)	-0.010 (0.006)	0.003 (0.002)	-0.007 (0.005)	0.012 (0.007)	0.001 (0.002)	-0.007 (0.003)	0.006 (0.005)								
Direct effect of Conform	0.182 (0.020)	-0.033 (0.018)	0.060 (0.027)	-0.056 (0.038)	0.070 (0.027)	-0.102 (0.023)	-0.021 (0.022)	0.078 (0.014)								
Total effect of EGA	0.064 (0.004)	-0.064 (0.004)	-0.059 (0.006)	-0.047 (0.007)	0.097 (0.006)	0.016 (0.005)	-0.034 (0.004)	-0.106 (0.005)								
Total Indirect effect via L/R	0.027 (0.001)	-0.032 (0.001)	-0.013 (0.002)	-0.019 (0.002)	0.048 (0.002)	0.011 (0.002)	-0.027 (0.001)	-0.048 (0.002)								
Direct effect of EGA	0.037 (0.004)	-0.032 (0.004)	-0.045 (0.006)	-0.028 (0.007)	0.049 (0.006)	0.005 (0.006)	-0.007 (0.004)	-0.059 (0.005)								
Direct effect of L/R	-0.309 (0.004)	0.360 (0.004)	0.112 (0.011)	0.188 (0.012)	-0.470 (0.008)	-0.112 (0.010)	0.331 (0.007)	0.387 (0.008)								
RMSEA/CFI	0.053/0.876		0.053/0.881		0.060/0.848		0.061/0.847		0.056/0.863		0.050/0.896		0.050/0.893		0.055/0.874	
r^2	0.171		0.335		0.087		0.103		0.502		0.185		0.300		0.313	
Direct Values on LR																
Traditionalism	0.260	*	0.226	0.361	0.289	0.265	0.313	0.234								
Individualism	0.294	*	0.316	0.348	0.349	0.297	0.268	0.304								
Authoritarianism	0.052	*	0.044	-0.052	0.032	0.051	0.051	-0.055								
Conformity	-0.029	*	0.029	-0.037	-0.025	-0.007	-0.020	0.014								
Egalitarianism	-0.244	*	-0.313	-0.277	0.132	-0.265	-0.226	-0.321								

Note: Standardised beta co-efficients reported. Figures in **bold** significant at the $p < 0.005$ level.

In the 1990 data the positive mediated relationship between Traditionalism and the Conservative vote is much stronger than the direct effect; this produces an overall significant positive relationship (0.077) between Traditionalism and the Conservative vote. It could be speculated that this represented the start of the de-coupling of Traditionalist values from the Conservative vote as the direct effect is negative and non-significant (compared with the structure shown in *Figure 5.4.*). There is some more convincing evidence in support of changes in the relationship between Egalitarianism and the Christian Democrat vote. In the 2008 models there was evidence of a confounding effect in this relationship. The direct relationship between Egalitarianism and the Christian Democrat vote was significant and positive, if small, at 0.015 but when mediated by left-right identity it became a negative relationship at -0.023 (see *Figure 5.4*). This could suggest a different influence for those who use the Christian Democrat party to directly link their values with broader Christian ideas regarding attitudes to wealth, and those who use left-right to structure their political preferences and are thus primarily concerned with more classical political divisions.

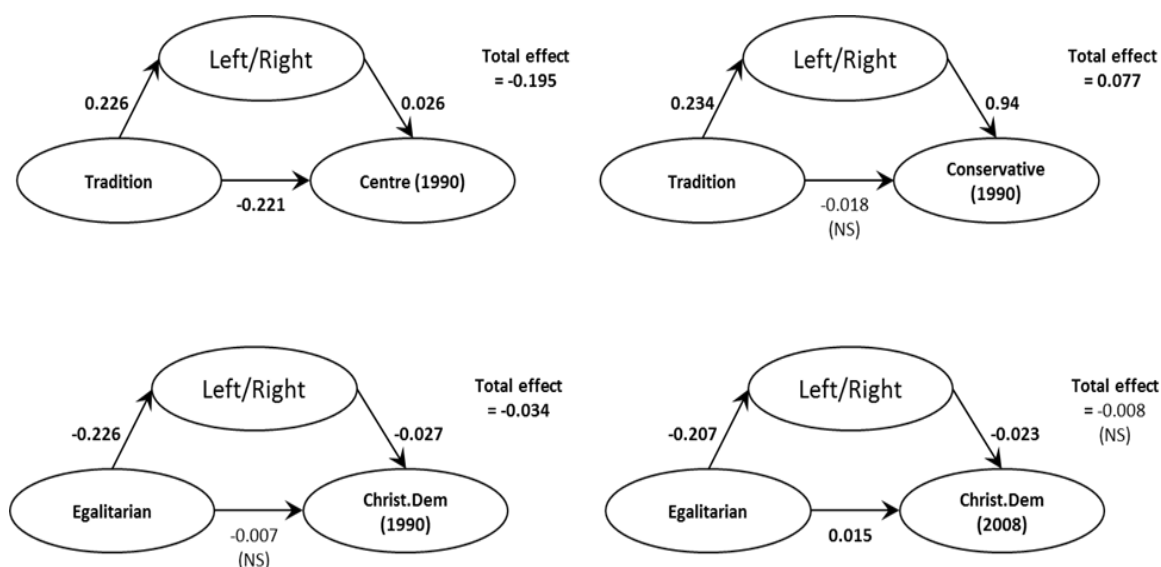


Figure 5.4 Diagram of Mediation Structures of voting highlighting key findings from the 1990 Models

In general though, the striking finding is that there is little variation in the values structure between the two models. Some relationships become clearer in the 1990 models because the overall relationship between values and voting appears stronger – but the structure of these relationships remains very similar. This suggests that there is stability over time in the relationship between values and voting that is more consistent with classic values theory (Rokeach, 1973). Overall, the models at the pooled level demonstrate some evidence for complexity in the relationship between values and voting: highlighting how political identity can both partially mediate and confound the relationship between values and voting. This suggests it is valid to

conceive left-right identity as an intermediate variable in this way even if full mediation has not been established in these models. The analysis now moves on to explore the potential of contextual differences in the mediation model by looking at the Protestant and Catholic country subsamples.

Stage 2 – Catholic and Protestant subsamples 2008

Table 5.5 presents the results from the Protestant and Catholic country subsamples. The fit for these models is within broadly acceptable boundaries for SEM models but they are generally weaker models than those at the pooled level. One interesting finding is that the r^2 appears much higher in the Protestant models than the Catholic ones in all four models; which would appear to suggest that the values model accounts for a greater amount of the variance in vote choice in Protestant than Catholic countries.

All of the models exhibit a strong significant relationship between left-right placement and vote choice. However, Traditionalism is barely significant in predicting Left-Right in the Protestant models and clearly has a much stronger influence in the Catholic models. As this is one of the more substantively relevant measures this presents challenges to the validity of the comparison but it may be indicative of wider variations in the values-voting relationship. This highlights one of the problems of the mediation analysis as it is set up here – it is assuming that the values content and meaning of left-right are broadly similar in each subsample when prior research shows that this is not the case (Piurko, Schwartz and Davidov, 2011). In other words, the three parts of the model are all subject to variation – there is no clear constant. It is likely that this is what is responsible for the variation that can be observed in the mechanism between the two subsamples.

Table 5.5 Mediation Model of Catholic and Protestant country type subsamples

2008 (Political Identity)	Centre Left		Centre Right		Christian Democrats		Conservatives	
	<i>n</i>	2192 (10105)	1878 (99112)	2112 (10105)	2643 (99112)	1102 (10105)	759 (99112)	1010 (10105)
Total, direct and indirect effects	Catholic	Protestant	Catholic	Protestant	Catholic	Protestant	Catholic	Protestant
Total effect of TRADIT	-0.087 (0.013)	-0.171 (0.020)	0.314 (0.012)	-0.018 (0.023)	0.315 (0.014)	0.257 (0.027)	0.133 (0.015)	-0.264 (0.024)
Total Indirect effect via L/R	-0.047 (0.004)	-0.019 (0.010)	0.126 (0.004)	0.007 (0.007)	0.079 (0.003)	0.006 (0.004)	0.114 (0.004)	0.019 (0.009)
Direct effect of Tradit	-0.039 (0.013)	-0.152 (0.019)	0.187 (0.012)	-0.025 (0.020)	0.236 (0.014)	0.251 (0.026)	0.020 (0.015)	-0.283 (0.021)
Total effect of INDIV	-0.240 (0.021)	-0.332 (0.015)	0.309 (0.021)	0.344 (0.015)	0.143 (0.023)	0.096 (0.019)	0.314 (0.024)	0.496 (0.016)
Total Indirect effect via L/R	-0.106 (0.007)	-0.157 (0.006)	0.138 (0.007)	0.113 (0.006)	0.086 (0.007)	0.053 (0.008)	0.126 (0.007)	0.159 (0.052)
Direct effect of Indiv	-0.134 (0.021)	-0.176 (0.016)	0.171 (0.021)	0.232 (0.015)	0.056 (0.025)	0.043 (0.022)	0.184 (0.024)	0.337 (0.017)
Total effect of AUTH	0.182 (0.069)	-0.016 (0.138)	-0.025 (0.063)	0.530 (0.170)	-0.046 (0.072)	0.191 (0.089)	0.015 (0.072)	0.191 (0.082)
Total Indirect effect via L/R	-0.027 (0.018)	-0.083 (0.037)	0.018 (0.019)	0.190 (0.052)	0.011 (0.012)	0.028 (0.012)	0.015 (0.008)	0.084 (0.038)
Direct effect of Auth	0.209 (0.069)	0.067 (0.021)	-0.042 (0.060)	0.340 (0.147)	-0.057 (0.072)	0.163 (0.082)	0.001 (0.070)	0.106 (0.027)
Total effect of CONFORM	0.097 (0.019)	0.108 (0.017)	-0.009 (0.019)	0.049 (0.017)	-0.028 (0.021)	0.009 (0.022)	0.024 (0.023)	0.108 (0.018)
Total Indirect effect via L/R	0.024 (0.005)	-0.010 (0.006)	-0.038 (0.005)	0.006 (0.005)	-0.024 (0.004)	0.003 (0.002)	-0.035 (0.005)	0.010 (0.007)
Direct effect of CONFORM	0.073 (0.018)	0.117 (0.016)	0.028 (0.018)	0.043 (0.015)	-0.004 (0.020)	0.006 (0.021)	0.060 (0.031)	0.098 (0.017)
Total effect of EGA	0.041 (0.006)	0.070 (0.006)	-0.154 (0.006)	-0.137 (0.006)	-0.003 (0.007)	0.015 (0.007)	-0.083 (0.007)	-0.173 (0.007)
Total Indirect effect via L/R	0.028 (0.002)	0.055 (0.003)	-0.080 (0.002)	-0.053 (0.003)	-0.018 (0.002)	-0.018 (0.004)	-0.027 (0.002)	-0.056 (0.003)
Direct effect of EGA	0.013 (0.006)	0.015 (0.007)	-0.075 (0.006)	-0.083 (0.006)	0.015 (0.007)	0.033 (0.009)	-0.056 (0.007)	-0.117 (0.007)
Direct effect of L/R	-0.422 (0.008)	-0.445 (0.008)	0.454 (0.007)	0.415 (0.008)	0.283 (0.011)	0.152 (0.015)	0.404 (0.010)	0.418 (0.009)
RMSEA/CFI	0.038/0.925	0.047/0.916	0.039/0.926	0.047/0.922	0.039/0.919	0.048/0.906	0.038/0.925	0.046/0.922
<i>r</i> ²	0.264	0.306	0.377	0.48	0.166	0.202	0.301	0.529
Direct Values on LR								
Traditionalism	0.282	0.042	0.278	0.042	0.279	0.039	0.282	0.039
Individualism	0.304	0.347	0.304	0.347	0.304	0.346	0.304	0.346
Authoritarianism	0.037	0.184	0.039	0.184	0.038	0.186	0.036	0.186
Conformity	-0.086	0.021	-0.083	0.021	-0.084	0.022	-0.085	0.022
Egalitarianism	-0.176	0.037	-0.075	0.037	-0.176	0.085	-0.176	0.085

Note: Standardised beta co-efficients reported. Figures in **bold** significant at the $p < 0.005$ level.

The greater variation is displayed in the Centre Right vote than the Centre Left. However, there remain some intriguing variations in Centre Left vote between the Catholic and Protestant samples (see Figure 5.5). For Traditionalism, the Catholic sample repeats the pattern that was found in the pooled models: that there is a significant negative relationship between Traditionalism and Centre Left voting and there are significant direct and indirect effects. Indeed, the Catholic sample shows a greater amount of variance being accounted for through left-right than in the direct relationship. In the Protestant model there is only a direct relationship; the indirect relationship is not significant. This further suggests that Traditionalism could be more of a long-standing central political values cleavage in Catholic societies and may tap into some aspects related to the importance of religious conviction to the left-right divide in these countries. In Protestant countries, as shown in the previous models on Conservative party families, voters positions on Traditionalism appear to represent more recent new politics issues and therefore are more likely to cross-cut classic left-right divisions. This finds some support when the relationship between Traditionalism and Centre Right vote is examined: there is no significant relationship between Traditionalism and Centre Right voting in the Protestant model, while the significant positive relationship in the Catholic model is the strongest values predictor in the model.

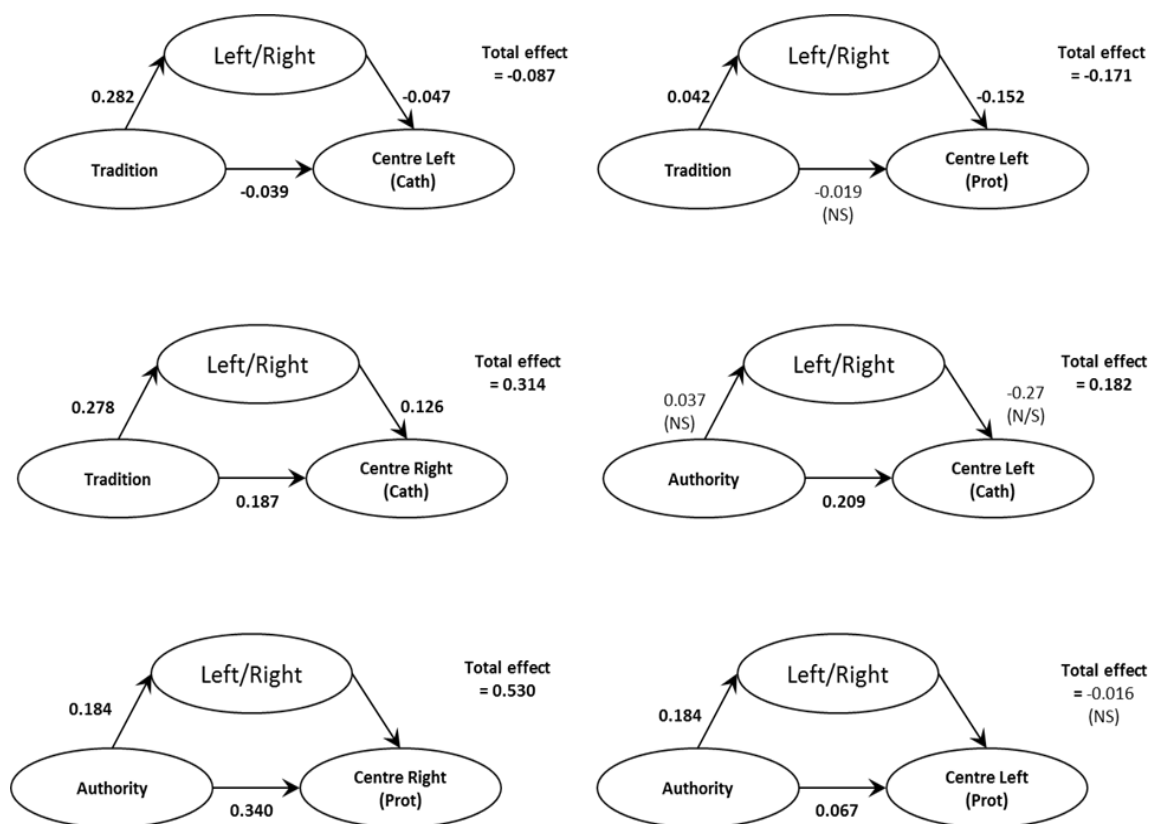


Figure 5.5 Diagram of Mediation Structures of voting on key values dimensions for Centre Left and Centre Right in Catholic and Protestant models

The final point to make relates to Authoritarianism: in the Catholic model there is just a positive direct relationship between Authoritarianism and Centre Left voting; in the Protestant model that relationship is confounded by a significant negative relationship that renders the overall effect of Authoritarianism on the Centre Left vote non-significant (*see Figure 5.5*). In the Centre Right model there is no effect of Authoritarianism on voting in the Catholic sample but both significant positive direct and indirect effects in the Protestant sample, which suggests a significant variation on how voters perceive parties on this values measure in different contexts. There is evidence that in Protestant countries when voters view politics through left-right positioning they perceive Centre Left parties as being non-Authoritarian - an association that is not made in Catholic countries.

As with the previous stage, splitting the Centre Right vote between Christian Democrat and Conservative party types highlights some interesting variations in the values-voting relationship. In the Protestant models it is possible to observe how these two constituent parts work against each other in the pooled model to create a null finding on the relationship between Traditionalism and Centre Right vote. There is no significant indirect effect in either the Christian Democrat or Conservative vote model but there is a strong positive relationship in the Protestant Christian Democrat model and a strong negative relationship in the Conservative one (*see Figure 5.6*). This clearly shows that when not viewed through the lens of left-right self-placement there is a large difference between the values voters perceive these party types as promoting. It also further supports the argument above: that in Protestant democracies the divide based on Traditional values is not necessarily seen as historic and based on a religious cleavage and therefore not perceived as fundamental to left-right political division. In the Catholic models left-right seems to have a far larger role in mediating the relationship between Traditionalism and voting: the Conservative vote in the Catholic model is fully mediated by left-right, suggesting that it is the left-right cue that is more important to identifying Traditional values with party choice in Catholic countries. This is consistent with the results in the Catholic Centre Left model. Finally, there is clear evidence that Authoritarianism is a positive predictor of the vote for both Centre Right family types in the Protestant models but for neither in Catholic models. Authoritarianism does not seem to map on to the Left-Right political divide in Catholic countries, which may explain why the pooled models exhibited a non-significant relationship between Authoritarianism and the Centre Right vote, confounding expectations.

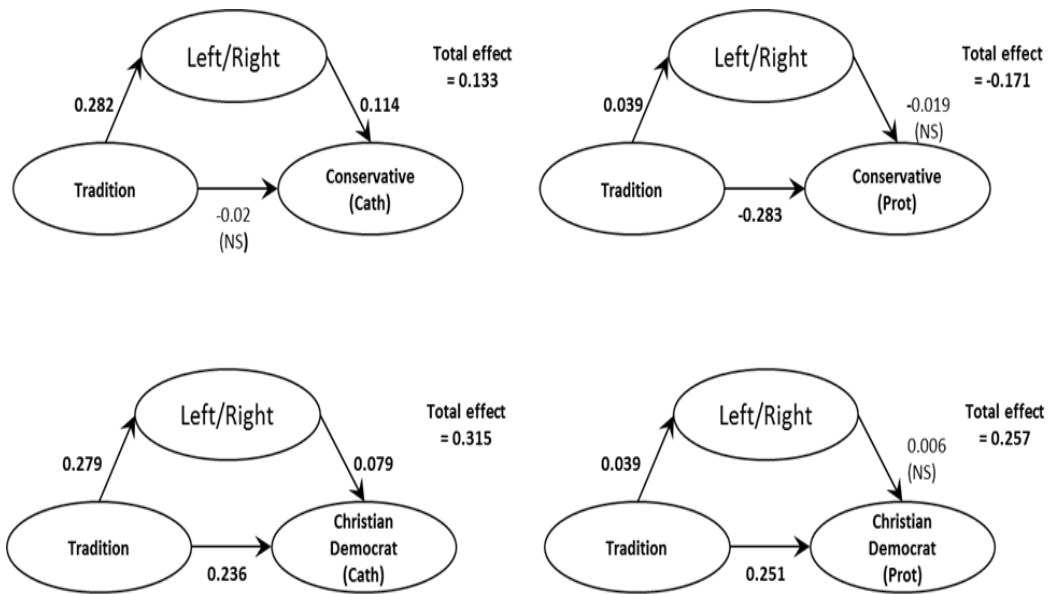


Figure 5.6 Diagram of Mediation Structures of voting for Traditional values dimension of Conservative and Christian Democrat party vote in the 2008 Catholic and Protestant country type models.

Discussion

Does left-right political identity mediate the influence of values on vote choice?

Core Hypothesis 1 *The relationship between the values measures and voting is partially mediated by left-right political identity.*

The findings broadly support the hypothesis that the values measures partially mediate left-right political identity. However, this does not do justice to the complexity of the structure through which this influence operates. The full range of intermediate influences was found in the mediation path models depending on the value in question, the party family that is being modelled or the political context. It appears left-right identity can have no significant effect on the values-voting relationship, partially mediate the influence of values on vote choice, fully mediate the relationship or confound the influence of a value on vote choice. Most of these relationships could be explained in reference to existing literature on political cleavage structures (Dogan, 1998; Raymond, 2011). So while the core hypothesis is broadly correct left-right clearly plays a major intermediate role in defining the values-voting relationship - that is not the only way that it influences the relationship. The more significant finding is not that the hypothesis is correct or incorrect; it is that the hypothesis itself and the broader theory that informed it is insufficient for explaining the complex dynamic range of relationships and factors that influence left-right as a mediating mechanism. A blanket hypothesis such as this is not really applicable to a mechanism that exhibits such broad variation. From the point of view of the overall argument of the thesis it is possible to say that left-right proves to be a substantively interesting mediator of the values-voting relationship. There are many examples of indirect effects and where these exist the results are generally consistent with prior research and existing theory (Feldman, 1988; Barnea and Schwartz, 1998; Inglehart and Welzel, 2010). There would appear to be support for the assertion that left-right can play an important role in priming the influence of values on voting. However, there is also significant evidence that when voters perceive the values-voting relationship through a left-right heuristic it can reverse the effect of values on voting in certain circumstances. For example, there has appeared to be a consistent direct positive relationship between Authoritarian values and the Centre Left vote in most models, which is somewhat counter-intuitive given normal expectations of political division and prior findings. By adding left-right as an intermediate in a path model it is possible to demonstrate that when seen through a left-right prism this effect is reversed and there is a significant negative relationship between Authoritarianism and Centre Left vote. The relationship is confounded and this calls into question the causal relationship. It is likely that the positive direct relationship between Authoritarianism

and Centre Left demonstrates that a large core of Centre Left voters adhere to some aspects of Authoritarian values. However, it does not mean that they connect those Authoritarian values to their vote choice. This is consistent with findings related to the behaviour of left-authoritarians in the West European electorate (Lefkofridi, Wagner and Willmann, 2014).

This approach therefore provides the basis of a nuanced understanding of the way in which voters link their political values preferences to party choice. It is not necessarily the case of a single mechanism fully mediating the role of political values across all electoral divisions, as has been demonstrated to be the case in research using individual values (Vecchione *et al.*, 2013). The fact that the mechanism shows large variance in terms of its influence on vote choice should be treated as a positive. The advantage of having values measures that are capable of highlighting strong negative views on values as well as positive ones is evident in these models. It is possible to state that an effect of values on voting can be reversed when viewed through left-right identity. The second way in which these findings support the overall theory of the thesis is that the variation is clearly based on a number of factors: party choice is one of them but there is evidence supporting variation in the mechanism by political context as well.

Is there variation in the mediation mechanism between different values measures?

Hypothesis 2 *Where a party preference is clearly identified as a left or right orientated party, Individualism and Egalitarianism will be mediated by left-right self-placement.*

This section addresses the claims that the left-right mechanism is likely to operate differently depending on the interaction between the specific values and party type. This is an attempt to establish whether the values measures were operating in a manner that has been consistent with other findings in the field; so that Individualism positively predicts vote choice for the Centre Right through voters placing themselves on the right of the left-right scale, while Egalitarianism positively predicts to the left of the scale (Feldman, 1988; Caprara *et al.*, 2007; Vecchione *et al.*, 2013). This relationship was consistent across all of the subsamples in both the 1990 and 2008 models. While there is no evidence of full mediation, voters appear able to directly connect these two values to vote choice without relying on a left-right heuristic; there are still strong indirect effects. This shows that left-right still plays a strong role in defining the relationship between these values and vote choice and that it can act as a heuristic. However, it is possible to speculate that issues related to Individualism and Egalitarianism are so central to political competition, with political actors likely to

make direct appeals to these values, that it is possible for voters to more easily associate their values position directly with a specific party. This appears to be supported by the evidence of negative associations between values and voting in both direct and indirect effects. The models above can add to an understanding of the relationship between these core political values and vote choice by demonstrating that there is a mirror effect in Individualism and Egalitarianism – with Right voters exhibiting strong negative views on Egalitarianism as well as strong positive views on Individualism; the reverse being the case for Left voters. It might be expected that these negative relationships are more likely to show evidence of being fully mediated, as connecting a negative association is a more complex process that is likely to require an intermediate heuristic to render it relevant to vote choice (Dirilen-Gümüş and Sümer, 2013). This is not what was found: for both positive and negative associations Individualism and Egalitarianism display significant direct and indirect effects on vote choice. It should be stated that Egalitarianism displays weaker effects on vote choice; this is probably due to the limitation of using a single item indicator that is likely to have a substantial portion of its variance accounted for by the influence of left-right as a direct predictor. *Hypothesis 2* is shown to be partially correct. Where voters are presented with a party family that can clearly be identified on the left or right these core political values are partially mediated by left-right identity, although there is no evidence for full mediation.

Hypothesis 3 *Where a party preference is clearly identified by its religious affiliation (for example, Christian Democrat party) Traditionalism will be a direct predictor of vote choice and will not be mediated by left-right identity.*

One of the most substantively interesting findings in the above analysis is the way in which left-right can explain variation in the values structure of vote preferences between the two main Centre Right party groups: Christian Democrats and Conservatives. This is evidenced in the structure linking Egalitarianism with vote choice, where a confounding relationship is shown in the Christian Democrat vote: with a positive relationship transformed into a negative one when associated with left-right position. However, it is in the relationship between Traditionalism and vote choice that the variations in this structure are sharply exhibited. The hypothesis, which is claiming that there will be no evidence of mediation of left-right for Traditionalism and the Christian Democrat vote, is not supported. The structure of the mechanism looks very similar to those represented by the core political values (Individualism and Egalitarianism) in the Centre Left and Centre Right models. This suggests that Traditionalism operates as a core political value for Christian Democrat voters and that there are both strong positive direct and indirect effects for Traditionalism on the Centre Right vote. This links to ideas concerning the development of Christian Democrat parties in representing a core religious-secular

cleavage in West European democracies (Klingemann, Hofferbert and Budge, 1994). In other words, once traditional values become embedded in a political system voters can attach left-right meaning to them, which is evidenced through partial mediation of Traditionalism through left-right. This would seem to be further supported by the fact that the Centre Right Conservative sister group evidenced a completely different mechanism on the Traditionalism–vote choice relationship. There was consistent evidence to support the findings in *Chapter 4*, that there is a negative direct relationship between Traditionalism and Conservative voting. When vote decisions are reached via a left-right heuristic then the negative relationship between Traditionalism and the Conservative vote becomes significantly positive. This may highlight a core divide in the underlying motivations of Conservative voters between modern economic libertarians and traditional values voters.

Hypothesis 4 *The effect of Authoritarianism and Conformity will be mediated by left-right identity but only for fringe party families (for example, Greens, Nationalist, Communist).*

This hypothesis remains unproven. It is possible that the values measures do not allow for sufficient nuances to be highlighted in the relationship between these values and vote choice. It is somewhat concerning that the relationship between Authoritarianism and right voting does not seem consistent with previous findings in this area (Jost *et al.*, 2003; Thorisdottir *et al.*, 2007; Aspelund, Lindeman and Verkasalo, 2013). The consistently positive direct relationship between Authoritarianism and left voting also appears somewhat counter intuitive; it is therefore important to acknowledge that there are some concerns with the validity of the measure. There seems little support for the hypothesis in the pooled models, as Authoritarianism does not seem to be mediated by left right. There is little effect of Authoritarianism on the Centre Left and Centre Right party choice – effects are either non-existent or very small and direct. There is also little influence among the vote models for the fringe parties. The only relevant finding regarding the mediating influence of left-right on the relationship between Authoritarianism and voting is that left-right shows a confounding influence in the Conservative and Nationalist vote choice models. In both of these models a negative effect is reversed through left-right identity to become positive. So there is some evidence that when identified as right of centre voters positively associate their Authoritarian values with right voting. However, without this heuristic it appears that they do not make that association. This finding adds something to the existing understanding of the interaction between Authoritarianism and right voting (Jost *et al.*, 2003; Goren, 2005) but needs to be treated with caution. As with the direct models, Conformity proved a poor predictor of vote choice across all models; so, very little can be inferred from this values measure and this may be due to a lack of variance in the indicators. *Chapter 4* failed to find a

substantively relevant direct relationship between Conformity and vote choice; *Chapter 5* has failed to find a relevant mediated relationship. It may represent a value within the electorate but it does not appear to be a particularly politically relevant value.

Does the mediating mechanism remain stable over time or is it subject to the effects of value change?

Hypothesis 5 *The left-right mediation mechanism linking values and voting will remain stable at the 1990 and 2008 time-points. However, the relationship between the 'non-political' values (Authoritarianism, Conformity, Traditionalism) are more likely to be subject to change than the relationship involving Individualism and Egalitarianism.*

This hypothesis is supported by the findings. The left-right mechanism for Individualism and Egalitarianism varies little between 1990 and 2008. This is to be expected, as these values represent recognised long-standing core political values that tap directly into left-right political division (Klingemann, Hofferbert and Budge, 1994; Kriesi *et al.*, 2008; Dirilen-Gümüş and Sümer, 2013). It is unlikely that there would be much variation in this mechanism between the two time points, and they both present evidence of strong direct and indirect effects. It is relevant that there is evidence of a stronger relationship between values and voting, for both direct and indirect effects, in 1990 than in 2008. This could be seen as providing some *prima-facie* evidence of partisan de-alignment (Dalton, 2006). However, such interpretation should be treated with caution given the difficulties of comparison. A more valid interpretation is that the basic structure of the values-voting mechanism for the two core political values (Individualism and Egalitarianism) remains the same. This stability in the mechanism is not in such clear evidence for other values. The variation in the relationship between Traditionalism and voting for Christian Democrats and Conservative parties is potentially indicative of wider value change and consistent with the literature on the weakening of traditional values and social ties in Western democracies (Dogan, 1998; Norris, 1999; Norris and Inglehart, 2004). The findings here broadly support this position and suggest that the values measures are tapping into stable underlying constructs. This complements recent literature suggesting that over time political parties can effect small movements in redefining the parameters of key political values of their voters but that the relationship between specific values and party support remains broadly constant, barring a major re-alignment shock (Goren, Federico and Kittilson, 2009; Westen, 2007; Vecchione *et al.*, 2013). The data here does not really allow for a full exploration of that theory. However, the striking stability in the mechanism between the two time-points suggests that in Western European Democracies the relationship between political values and voting

remains stable and potentially associated with the social cleavage – party positioning dynamic.

Does the mediation influence of left-right vary by Political Context?

Hypothesis 6 *Based on previous research on long-standing political cleavages (Raymond, 2011) Traditionalist values will be mediated by left-right identity in Catholic countries. However, in Protestant countries, the relationship between Traditionalism and vote choice is expected to be direct as it does not represent such a long-standing division.*

The final stage of the analysis demonstrated that when party choice is modelled in Catholic and Protestant subsamples there seems to be considerable evidence of contextual variation. The hypothesis is proven correct but only explains part of the story. These findings provide some initial support for the theory that variation in long-standing cleavage divides and party positioning define the parameters of the mediation mechanism. In order to fully examine the validity of this argument it will be important to add country level political variables to the model. Therefore, full discussion of this question will be held over to the next chapter. However, from the point of view of the overall thesis the identification of contextual variation in the mediation process provides justification of the overall approach to studying the values-voting relationship.

Conclusion

This chapter has tested the theory that left-right political identity mediates the relationship between values and vote choice. A number of other relationships were also explored that were relevant to the overall aims of the thesis: whether the mediating mechanism varied over time, between values types, across political contexts and by party type. Full Structural Equation path models were estimated in order to test for these effects. The analysis suggests that the original mediation theory developed in the first half of the thesis has underestimated the true complexity of the mediated relationship between political values and voting. There is evidence that left-right identity exhibits the full range of mediation effects depending on the party type, political context and the specific values that are being modelled. There is also evidence that left-right can operate as a mediator and a confounder of party choice. So while there is insufficient evidence to support the overall theory of mediation, it is equally clear that left-right identity can highlight key variations in the values-voting relationship and that it is affected by contextual factors. This chapter has been able to build on previous research into the mediating influences on the values-voting relationship in two important respects. Firstly, the values measures

allow for voters to express negative associations with particular values types thus reflecting the nature of political values based electoral division in which voters are likely to identify both their negative and positive values positions to party choice. Secondly, the comparative aspect allows for consideration of the way in which the left-right mechanism is likely to vary across different political cultures. It is possible to establish that patterns at the pooled level create potentially false findings when broken down into country type sub-samples. This suggests that there is clear evidence of contextual variation and that it is necessary to examine country-level effects. It is to this key area that the thesis now turns in *Chapter 6*. This chapter has demonstrated that contextual variation exists in the mechanisms that link values and voting, the next stage is to attempt to identify the sources of that variation by introducing macro-level measures to the model.

Chapter 6 The influence of political context

Introduction

The main aim of this final empirical chapter is to analyse the extent to which political context influences the values-voting relationship. The chapter completes the empirical analysis by introducing party system measures into the model. Previous analysis touched on this by splitting the pooled sample into a general Catholic and Protestant country typology based on Inglehart and Welzel's (2005) work. This provided some initial evidence supporting the theory that variation in the mechanism linking values and voting is related to the political cultural context in which voters make their choices. This theory is further tested through the more systematic analysis presented here, which considers this relationship at the cross-national level. Previous cross-national work in this area has focused either on the direct relationship between values and voting or the distinction between personal values and political values (Barnea, 2003; Schwartz *et al.*, 2014). There are no studies that have considered cross-national variation in the values-voting mechanism itself and few previous studies that have analysed the influence of political context on the values-voting relationship (Knutsen and Kumlin, 2005). Previous research has highlighted cross-national variation in the values structure underpinning left-right identity, with a focus on variation between East and West Europe (Pioro, Schwartz and Davidov, 2011; Aspelund, Lindeman and Verkasalo, 2013). However, this literature has focused almost exclusively on the Schwartz values, with the primary intention of demonstrating similarities in how underlying values can universally predict political division. This research approach is based on the social-psychology tradition and therefore its main focus has tended towards demonstrating universal structures of human values. This chapter is taking a more political perspective on the values-voting relationship: it aims to assess the extent to which cross-national variation in the relationship between political values and voting can be explained by the electoral context voters face.

In taking this approach the chapter aims to make the following contributions to the relatively sparse cross-national literature in this area:

1. By examining the influence that political context has on the values-voting relationship this chapter will be taking a systematic approach to analysing the relevance of supply side factors in shaping the influence of values on voting. This form of contextual analysis is largely absent from the existing literature.

2. By taking a conceptual approach to the values-voting relationship that is grounded in theories of political choice. In so doing the study is assuming that the programmes of political parties and the party systems they operate in play a crucial role in determining when values become relevant to voters choices. This means that the analysis is assuming that variation in the political choices faced by voters will create substantial cross-national variation in the values-voting relationship due to differences in the choices with which voters are presented. Specifically it is expected that in more polarised political systems party programs and appeals are likely to be more clearly differentiated and values orientated. Voters are likely to find it easier to identify parties that represent their values in these circumstances (Knutson and Kumlin, 2005).
3. By taking a cross-national approach, that includes contextual indicators, the analysis can produce an assessment of the importance of party positions in defining how and where values become relevant to the preferences of voters. There is no current Europe wide cross-national comparative study that considers the influence of political context in shaping how voters convert their values into voter preferences.

A brief discussion setting out the relevance of political context is presented in the section below. The main focus of the analysis in this chapter is on identifying whether it is the content of political choices facing voters or the structure of those choices that influences the relationship between values and voting. In order to operationalise this approach, measures of party system polarisation and the effective number of parties have been taken from the *Parlgov* (Döring and Manow, 2012) website, which provides a figure for each of these indicators at each election in all 15 European countries that have been included in the analysis. A meta-analysis approach will be applied. The analysis will be based on estimating the same SEM political identity model that was used in the previous pooled level analysis for each of the 15 countries at both the 1990 and 2008 time points. Overall the analysis can consider 30 political contexts. This means comparison can be made on the overall strength of values on vote choice in different national contexts, across different party families and between time points. Once this has been established, the party system measures are introduced to the analysis to measure the extent to which they can account for this variation. Repeating the SEM approach at the cross-national stage allows for a further assessment of the political identities mechanism: namely, whether party system effects have a direct or indirect influence on the values-voting relationship. The analysis will highlight the following key findings:

- 1.** *Polarisation has a small, but relevant, effect on values and voting for mainstream parties, which varies considerably by party type. However, the analysis failed to*

establish any relationship between the number of parties voters are faced with and the strength of the relationship between values and voting. This is the key finding – it supports the theory that it is the content of political competition that makes values relevant to vote choice, not the structure of competition. To some extent this validates the previous findings of Knutsen and Kumlin (2005) and the political choice approach to the values-voting relationship. It also lends broader support to a theory of values and voting that is rooted in political context.

- 2. Increased polarisation considerably strengthens the influence of values on Conservative party family voting but has a more complex influence on the values effects for the Christian Democrat vote. Polarisation has little influence on the association between values and Centre Left voting. This lends further tentative support to the theory that mainstream right parties are more effective at priming the values of their voters than left parties.*
- 3. Polarisation has a larger effect on the values-voting relationship for non-mainstream parties such as the Nationalist and Communist party families although it has little effect on the Greens and no effect at all on centre party voting.*
- 4. For the three values that are 'non-core' (Traditionalism, Conformity, Authoritarianism), polarisation can still influence the values-voting relationship but the direction of the effect varies widely and the patterns are hard to discern. In some circumstances polarisation appears to decrease the strength of the relationship between specific values and party choice.*
- 5. The effect of polarisation is largely driven by stronger direct effects, not indirect effects. This suggests that contrary to the theory proposed in the earlier chapter, voters are capable of directly converting their values into preferences without the use of political heuristics but that they require clear cues differentiating parties in order to do so.*

The chapter will proceed by firstly outlining the theoretical assumptions behind the role of political context in defining the relationship between values and vote choice. This will lead into a statement of the research questions and hypotheses that will relate the contextual measures back to the theory of political choice. The results of the analysis are then presented, starting with the cross-national analysis of the overall influence of values on voting; then findings will be presented from the main analysis showing the association between polarisation, the effective number of parties and the strength of the values-voting relationship in each country. These results will be organised by each value dimension and party family type. The last stage of the analysis parcels out this overall effect by its direct and indirect component parts. The final section of the chapter will be a brief discussion linking these findings to the

overall themes of the thesis and explaining how they lend further support to a contextual approach to the values-voting relationship, which will be elaborated in the concluding chapter.

The influence of political context on the importance of values

The specific aspect of political context this chapter is aiming to test is whether the content or structure of the party system is relevant for priming the influence of values for voters. In order to test this, the analysis will be primarily focussing on the influence of Political Polarisation and Effective Number of Parties (ENEP) on the strength of the values-voting relationship. Past research has generally shown polarisation to have a stronger effect on political behaviour and attitudes than the number of parties (Dalton, 2006; Lachat, 2008; Dalton and Anderson, 2010). Dalton, Farrell and McAllister (2011) demonstrated that the strength of subjective left-right identity was strongly influenced by how polarised the party system was; the conclusion being that in more polarised party systems voters find it easier to distinguish and develop a distinct left-right ideological position as it appears most relevant to political division. In addition Knutsen and Kumlin's (2005) study of value orientations and party choice in 6 Northern European countries offers some initial evidence of a relationship between levels of polarisation and the strength of the values-voting relationship. Importantly this provides a convincing explanation for why the strength of the values-voting relationship represents a trendless fluctuation whereas other social predictors of vote choice, such as social class or religion, tend to show a decline in predictive strength. However, Knutsen and Kumlin used a measure of polarisation that was at the individual level rather than the party level. The party system data that will be used in this analysis is drawn from the Comparative Manifesto's Project (Volkens *et al.*, 2014) which should reduce the risk of conflation with individual level measures. Coupled with the applications of the SEM approach the analysis will be able to test whether the influence of polarisation on the values-voting relationship is direct or reflected through a heightened sense of left-right identity.

It would also be expected that the number of choices available to voters would make a difference, as with higher ENEP voters would be able to identify a party that reflected their political outlook more precisely. However, on this measure Dalton did not find a relationship between left-right identity and ENEP, suggesting that it is the competitive context of party systems that is relevant to voters, not the structural context. It would be expected for values to have a stronger effect on vote choice in countries with higher levels of polarisation, as the effects of both political messaging and the perceived stakes are likely to be greater (Dalton, Farrell and McAllister, 2011). If more party choices are available then it is likely to motivate parties to clearly differentiate. Activating core political values among segments of the electorate allows

parties to develop a base in more competitive multi-party systems. Therefore it is likely that values will have a stronger effect on vote choice preferences in countries in which voters are presented with a larger number of viable electoral choices.

The research design has been set up to test these contextual effects. The values measures used provide an assessment of both positive and negative associations between values and vote choice. For example, a left voter with a strong anti-individualist and pro-egalitarian outlook is likely to vote for a Centre Left party that primes one of those two values. But that same voter may abandon that party if there is a viable party in the system that primes both of those values. In addition, the political identities model from the previous chapter will be able to highlight whether contextual variation is the result of direct effects (voters can directly associate their values with their preferences) or indirect through voters sense of their own left-right political identity.

Research Questions

1. Is there cross-national variation in the mechanisms linking values and voter choice?

The overarching question the chapter is attempting to address is whether there is cross-national variation in the mechanisms through which values influence voting. It is assumed that as values are formed in social contexts and social contexts vary between countries that the relationship between values and voting will also vary (Inglehart, 1997). It is likely that political values will prove to be a more important source of political differentiation in some countries than others and that the mediation mechanism will operate differently between countries. It is also likely that the extent to which specific values are relevant to vote choice will vary between countries. Due to the complex relationship between values and voting that was highlighted in the previous chapter, this remains an exploratory, overarching question and no specific hypotheses are posited at this stage.

2. Does increased party system polarisation produce a stronger relationship between values and vote choice?

In more polarised systems parties have clearly staked out their positions and are more likely to have framed their position in a zero-sum values appeal to the electorate. Therefore, as a system becomes more polarised it is easier for voters to directly identify their values with a particular party. This connects with literature regarding the rise of values voting in the US (McCann, 1997; Goren, 2005; Goren, Federico and Kittilson, 2009). It is therefore likely that the influence of values on vote choice will

vary between countries in terms of the relevance of the values, the direction of the effect of values on vote choice and in the mediating mechanism through which values influence vote choice.

Hypothesis 1 - *In countries with a higher level of political polarisation there will be a stronger relationship between values and voting.*

It is important to acknowledge the complexity of the relationships that exist within the analysis. While the expectation is that polarisation is likely to increase the importance of values for voters' choices, it is also important to acknowledge that this effect is unlikely to be even across all parties and all values dimensions. Firstly, if a party system is more polarised then that is likely to mean that the issues that challenger parties tend to identify with have become more salient. Therefore, the expectation is that polarisation will have a larger influence on the relationship between values and non-mainstream parties than on voting for mainstream parties of the Centre Left and Centre Right. This leads to the following hypothesis:

Hypothesis 2 - *The effect of polarisation on the relationship between values and voting will be stronger for non-mainstream party families such as the Communists and Nationalists.*

Analysis in the previous chapter demonstrated a stronger relationship between values and voting for parties of the right. This would appear consistent with research suggesting that parties of the right are more effective at appealing to a larger range of 'political taste buds' than parties of the left (Haidt, 2012). It is expected that this effect will be thrown into even sharper relief in countries that exhibit higher levels of polarisation - as the stakes will be higher.

Hypothesis 3 - *In countries with a higher level of polarisation there will be a stronger relationship between values and voting for mainstream parties of the right than of the left.*

It is likely that there will be considerable difference highlighted in the effect of political polarisation between the two Centre Right party families. Previous findings at the pooled level have shown that values have double the effect on Conservative voting than on Christian Democrat voting. It is therefore expected that polarisation will increase the effect of values on the Conservative vote. Due to the historic religious cleavage represented by Christian Democrat parties, it is expected that increased polarisation would increase the influence of Traditionalism on the Christian Democrat vote (Raymond, 2011).

Hypothesis 4 - *Polarisation will increase the strength of the relationship between values and the Conservative vote but not the Christian Democrat vote (with the exception of Traditionalism).*

3. Does an increased number of parties in a political system produce a stronger relationship between values and vote choice?

The logic for the expected influence of party polarisation on the values-voting relationship can be repeated for the number of parties in a political system. This is not as consistent with previous findings but, as stated above; it is based on a theory that a wider party choice creates a greater incentive for parties to clearly differentiate themselves (Dalton and Anderson, 2010). If there are a large number of viable party alternatives then those parties will have to identify with specific sections of the electorate and therefore will be much clearer in tailoring their message to resonate directly with the values of voters.

Hypothesis 5 - *In countries with a higher ENEP there will be a stronger relationship between values and voting.*

Finally, the political identities model allows a test of whether any relationship between party systems and the strength of the values-voting relationship is driven by direct or indirect effects. It is likely that in electoral context in which voters have more clearly differentiated choices they will find it easier to match their values directly to their vote preferences, as parties will be directly priming these rather than relying on historic assumptions of voters left-right identity. It is therefore expected that variation in the strength of the values-voting relationship will be driven by an increase in the strength of direct effects.

Hypothesis 6 - *Changes in the strength of direct effects (the ability of voters to directly associate their values with a party preference) are the primary cause of party system influence on the values-voting relationship.*

Data and Methods

The analysis follows Achen (2005) in taking a two-step hierarchical regression approach to analysing a series of national level Structural Equation Models. In order to focus on measuring the influence of contextual variation, a form of meta-analysis is used. To begin with the pooled EVS datasets used in the previous three analytical chapters are split into the 15 countries in the data at both the 1990 and 2008 time points²⁷. This creates the cross-national data and generates 30 separate, though not independent, data points. Vote choice is then modelled at the national level in each country following the same procedure developed in the previous chapter. SEM models are estimated for the vote of each party in each country using the political identities model. Vote choice is predicted using the 5 values measures as the primary predictor variables and subjective left-right identity as the mediator variable. The dependent variable for vote choice is treated as a binary outcome variable. The SEM analysis therefore takes place in a logistic regression framework with separate models being run for each party in the analysis. In order to estimate the relative strength of the effect of values on voting the r^2 figures for each of these models are compared by country, time period and party family type. This is to assess whether there are any common patterns in the geography of the values-voting relationship, whether there is clustering by survey wave or variation in the strength of the effect on different party types.

The analysis then moves on to consider the influence of the contextual measures on the relationship; it focuses both on the comparative strength of the relationship between each value and vote choice for each party and the direction of that effect. In other words, it can highlight the influence of contextual measures on both the positive and negative relationships between values and vote choice. This second stage of the two-step process is relatively straightforward. Standardised *beta* co-efficients have been produced, estimating the effect of each value on vote choice for each party family in each country. This replicates at the national level the political identities SEM model that was estimated at the pooled level in the previous chapter. It therefore includes the total, direct and indirect effects (via left-right identity) being reported. The co-efficient estimates are then graphed against the measures of party system context to test whether there is a relationship between these party system factors that influences the strength of the values-voting relationship. Measures of Polarisation and ENEP are taken from the *Parlgov* data for the nearest future election to each survey date (Döring and Manow, 2012). This tests the hypotheses related to the influence of contextual factors on the values-voting relationship. The final part of this analysis tests the robustness of these findings by running a GLM regression with the r^2 scores

²⁷ Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom.

as the dependent variable. This assesses the influence of party system effects on the overall strength of values on voting, rather than between specific values and voting, to test whether the party system effects can be generalised. Further party system and spatial variables are included in this model as controls: party support (measured as the % of voters in each national sample); party age (measured as years between the formation of the party and the survey year); party type (defined by party family assignment in CMP Data), and European region. This final measure is taken from Inglehart and Welzel's (2005) national values typology that identifies distinct clusters of country types. Slightly amended for the purposes of this analysis, it creates 4 regions in Western Europe further nuancing the Catholic/Protestant divide proposed by Inglehart and Welzel: Northern Catholic, Southern Catholic, Nordic and Northern Protestant.

A multilevel modelling strategy was considered for this stage of this analysis. This would have been appropriate for modelling the second level contextual effects and aided presentation. There were two main reasons why a multilevel approach was not applied in this instance. Firstly, it was decided that fitting a complex latent structural model with missing data across the different observations would likely cause instability in the structural model and make it difficult to estimate reliable findings. Secondly, it was decided that there were not a sufficient number of second level observations to produce viable estimate of the contextual effects. Therefore, the meta-analysis was applied which is consistent with the approach taken to analysing contextual effects by Knutsen and Kumlin (2005). For a more in depth discussion of this research decision and its implications please see the limitations section in *Chapter 7*.

All models were run in *Mplus* using the WLSMV estimator and bootstrapping to account for the dichotomous nature of the dependent variable and to apply a robust FIML approach to dealing with missing data. (See *Appendix 8* for description of the amount of missing data in each national level sample).

Results

r^2 findings

165 separate models were estimated for different parties across the 15 separate countries. The number of parties modelled ranged considerably between countries, with a low of 3 (Portugal and Spain in 2008; Iceland, Ireland and Portugal in 1990) to a high of 6 (8 examples across the two waves). See *Appendices 10 and 11* for full detail of the national level models. The parties are categorised by party family but in some countries capturing the broad Centre-Right vote involved combining the data for Conservative and Christian Democrat parties; where this occurred a separate model was also run for each party as well²⁸. So there is a considerable range of party system competition across the sample. There is little variation in the number of parties modelled between the two waves. 81 of the party models were from the 1990 data and 84 from the 2008 data. The first use for the r^2 analysis is to demonstrate that comparing the findings from 1990 and 2008 waves is valid. As *Table 6.1* shows, there is no obvious effect of survey year on the strength of values. The mean average strength of the r^2 across all 165 models was 0.366; the mean average strength of the r^2 in the 81 models from the 1990 data was 0.363 compared with 0.370 in the 2008 model, which is a negligible 0.07 difference. The range does not differ much either: the lowest r^2 in the 1990 data is 0.041 and the highest is 0.807. In 2008 the range is from a low of 0.011 to a high of 0.837. Finally, there does not seem to be very much variation in the distribution of extreme values between the two years. In 2008 there were 24 models with a strong r^2 value of over 0.50 compared with 18 for 1990. There were 10 models in 2008 with a weak r^2 value of under 0.10 compared with 9 for 1990. Therefore, it is possible to say with some confidence that there is no clear effect of survey year and it is therefore valid to compare the cross-national findings from 1990 and 2008 together.

²⁸ This procedure was used in the earlier chapter and is carried out in order to measure the influence of values on the mainstream party competition between Centre Right and Centre Left parties; which arguably remains an essential feature of electoral competition in all countries in the analysis apart from Ireland.

Table 6.1 Value and distribution of r^2 by year and country

2008	r^2	1990	r^2
Spain	0.520	Netherlands	0.472
Iceland	0.428	Denmark	0.432
Sweden	0.426	Norway	0.431
Netherlands	0.402	Iceland	0.428
Finland	0.384	Portugal	0.384
Norway	0.381	Sweden	0.380
Austria	0.375	Germany	0.359
Denmark	0.372	Austria	0.341
Italy	0.358	Spain	0.321
Portugal	0.348	UK	0.308
France	0.291	Finland	0.306
UK	0.236	France	0.284
Germany	0.206	Italy	0.264
Belgium	0.194	Belgium	0.255
Ireland	0.132	Ireland	0.151
2008 Average	0.337	1990 Average	0.341

The similarity in the effects between 1990 and 2008 suggest that the r^2 may be clustered by the other 2 factors in the model: party type and country. Focusing on party type, *Table 6.2* highlights the mean average of r^2 and shows some support for the hypothesis that values have a stronger influence on right of Centre voting. The mean average for Centre Right parties is 0.473 which is 0.155 higher than the average for Centre left voting of 0.318 – almost 50% stronger. When the Centre Right party vote is split into its Christian Democrat and Conservative party family variants, it is clear that this effect is almost entirely driven by the stronger relationship with the Conservative vote: the average effect of values on the Conservative vote is nearly 50% stronger than for the Christian Democrats at 0.496 to 0.335. This may represent the influence of Individualism and Egalitarianism in the values model. The argument being that the way in which Conservative parties are classified in the CMP data focuses as much on their commitment to free market economics as it does to their social values (Volkens *et al.*, 2014). Christian Democrat parties are differentiated in the CMP typology by their commitment to traditional social values and paternalistic economic policies. Therefore, Christian Democrat values may not be as politically salient in all contexts, whereas the values defining the Conservative vote are likely to be universally relevant in West European democracies. However, this is quite a considerable variation considering the average effect of values on the Centre Right vote. It demonstrates that the variation between Centre Left and Centre Right parties is almost entirely driven by the relationship between values and the Conservative vote. The variation in the r^2 values of the Centre Left and Christian Democrat parties is negligible.

Table 6.2 Mean average of r^2 by party family type

Party Family	r^2
Communist	0.55
Conservative	0.51
Centre Right	0.47
Christian Democrat	0.34
Centre Left	0.32
Green	0.32
Nationalist	0.25
Centre/Liberal	0.16

As might be expected the impact of values on Centre party voting is generally weak with a mean average of 0.164. For the fringe party families the effects are variable: the Communist party family has the highest average of 0.552, while the effect of values on the vote choice for the Nationalists is less than half of that at 0.253. It is likely that this reflects heterogeneity in the 'Nationalist' categorisation in the CMP data, which includes Nationalist parties of both left and right (for example, Sinn Fein and the Italian Northern League are both categorised as 'Nationalist' but few would claim these parties had similar values). There was not a sufficient number of Nationalist cases to examine this potential difference. The effect on the Green vote is also below the average overall effect at 0.320. This may be because the values dimensions that have been used in this analysis do not fully capture the political values of Green voters; it is reasonable to assume that Green voters are likely to have more exocentric value preferences (Kitschelt and Hellemans, 1990). So there are mixed findings regarding the relative strength of values effects on party voting. For mainstream parties, it would appear that values are more important to the Centre Right vote. For fringe and challenger parties there appears to be no clear pattern by party type.

Table 6.1 gives the mean averages of r^2 effects by year for the 15 countries in the analysis. The findings are generally inconclusive but there are a couple of noteworthy points. First of all the Netherlands, a fluid multi-party system, has the strongest relationship between values and voting overall. This is interesting when compared with Belgium, an equally fluid multi-party system that exhibits a consistently weak relationship²⁹. Ireland also exhibits a very weak relationship between values and voting; this might be considered consistent with Ireland standing as an outlier in European party system development in the sense that class and religious cleavages have never been prominent predictors of Irish voting behaviour (Marsh and Mikhaylov, 2012). It is also notable that the UK, Germany and France – the oldest, largest and most influential democracies in Western Europe – all have mean r^2 s that are below the

²⁹ This may well be reflective of Belgium's split between Walloons and Flemish not being accounted for in these models due to insufficient cases in the 1990 data.

overall average in 2008 and only Germany in 1990 has an effect that is above the average. Values appear to have a consistently strong effect in predicting the vote in the Nordic countries: all record above average overall r^2 effects and only Finland in 1990 falls below the overall average in that year. Portugal and Austria are notable for being consistently in the middle of the r^2 distributions.

Overall, these findings reflect a surprising degree of stability in the effects of values on voting in these countries; only Spain and Germany seem to exhibit much of a change in the strength of the values model between the 2 time-points. The strength of the model in Germany decreases by 15.3% between 1990 and 2008, while increasing in Spain by 19.9%. No other country shows a difference of 10% and over half show a negligible difference of 6% or lower. This relative stability by country across the two time points suggests there can be some confidence that variation between countries is genuine and not simply random fluctuation. *Figure 6.1* illustrates the average strength of r^2 on Party Choice by country, and clearly shows the relative strength of values in the Nordic countries and the relative weakness of their effects in Germany, UK and France. It depicts a sandwich effect, with values having a relatively low effect on the Northern European democracies compared with stronger effects in the Nordic countries to the North and Southern Catholic countries to the South (with Netherlands being a notable exception).

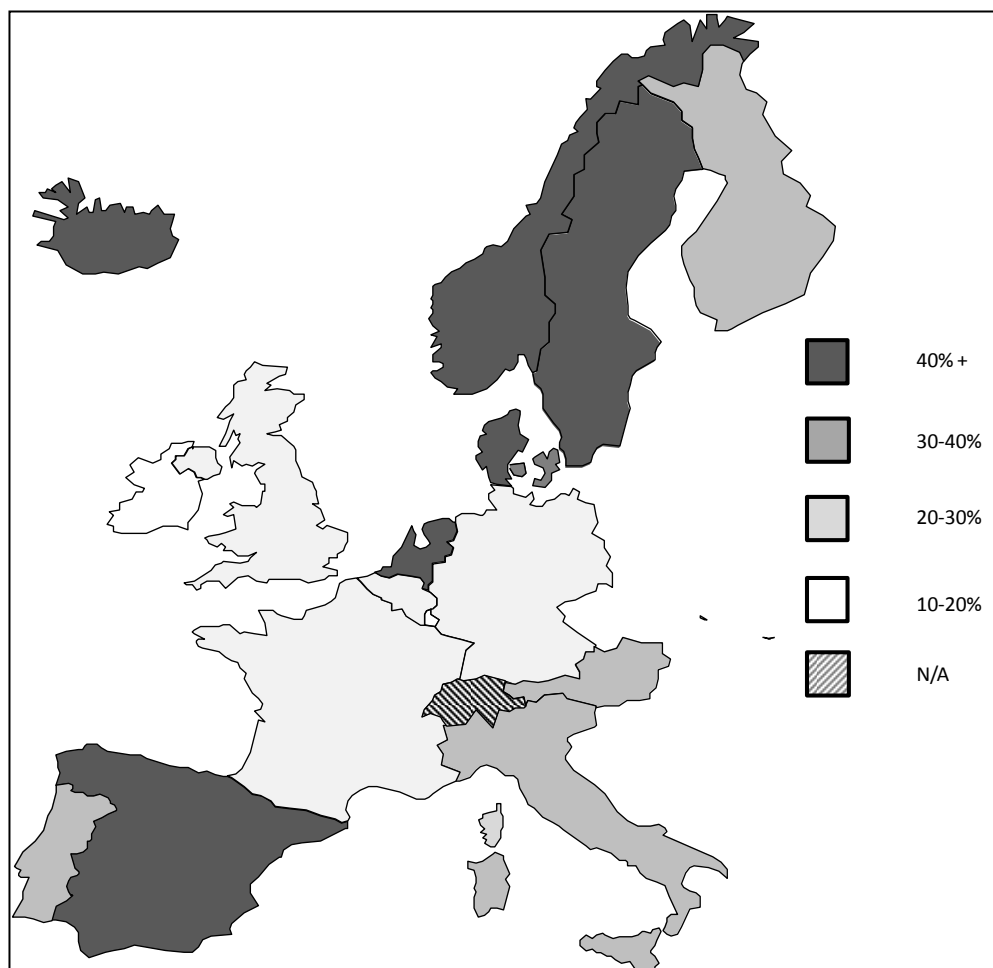


Figure 6.1 – Map of Values Strength in Western Europe

Party Polarisation

Appendix 10 presents the number of voters for each party in each country. One problem with taking this approach to the analysis is the relatively small number of cases when the analysis moves to the country level. The cut-off point for a party to be included in the analysis was 50 but exceptions were made to this in cases where the Centre-Right vote was represented by both Conservative and Christian Democrat parties within a country as observing the variation in this structure was substantively worthwhile. *Appendix 10* also shows the categorisation of each party-by-party family type. Scores for Party Polarisation and the Effective Number of Parties were taken from the ParlGov (Döring and Manow, 2012) website. This is a resource website for Political Scientists that compiles data related to party systems and elections results across Europe since 1945. The measure of polarisation utilised by ParlGov is the well-regarded Dalton Index (2008). The score on the Dalton polarisation index has been calculated for each party system for each election in each country (Döring and Manow, 2012). *Table 6.3* reports the polarisation scores and ENEP score for each country in the analysis. These scores were taken from the nearest election in that country to each survey point.

Table 6.3 Party polarisation and effective number of parties for each country

Country	Party Polarisation		Number of Parties	
	1990	2008	1990	2008
Austria	0.38	0.44	3.2	4.8
Belgium	0.41	0.43	9.8	9.0
Denmark	0.40	0.45	4.8	5.4
Finland	0.34	0.34	5.9	5.9
France	0.42	0.44	4.3	4.1
Germany	0.30	0.40	3.7	5.6
Iceland	0.46	0.45	4.2	4.6
Ireland	0.33	0.28	3.4	3.7
Italy	0.41	0.41	6.6	3.6
Netherlands	0.40	0.49	3.9	7.0
Norway	0.49	0.51	4.8	4.6
Portugal	0.38	0.42	2.8	4.1
Spain	0.39	0.42	4.1	2.8
Sweden	0.44	0.43	4.6	4.6
United Kingdom	0.40	0.29	3.0	3.7

The graphs (*Figures 6.2-6.7*) show broad, if qualified, support for the hypothesis that increased polarisation is associated with a stronger relationship between values and voting. There is also limited support for the theory that values have a stronger influence on the vote for parties that are further from the centre in more polarised systems. Finally, as the Conservative party family exhibits the closest relationship between a stronger effect of values and polarisation than any other, there is some evidence to support the theory that values have a stronger influence on right of centre voting than left of centre voting in more polarised party systems.

The clearer findings relate to the core political values in the model: Individualism, Egalitarianism and Traditionalism. In general the relationship between polarisation and the strength of values on the Centre Left vote is small to non-existent when compared across both time-points. There is evidence of a very small effect of polarisation on Individualism and Centre Left voting (*See Figure 6.2*) but it is far from conclusive. The relationship is small but polarisation does seem to be related to a stronger negative effect of Individualism. However, not only is this very questionable as a finding in itself it is also not supported by observing an equivalent effect for Egalitarianism on Centre-Left voting. Past research consistently finds a positive association with Egalitarian values as the strongest values predictor of the Centre-Left vote. Therefore, the fact that it does not seem susceptible to any effect of polarisation would likely suggest polarisation has little effect on the relationship between values and Centre-Left voting.

Figure 6.2 Graphs of Polarisation by the effects of 'Core Political Values' on Centre Left and Centre Right Voting

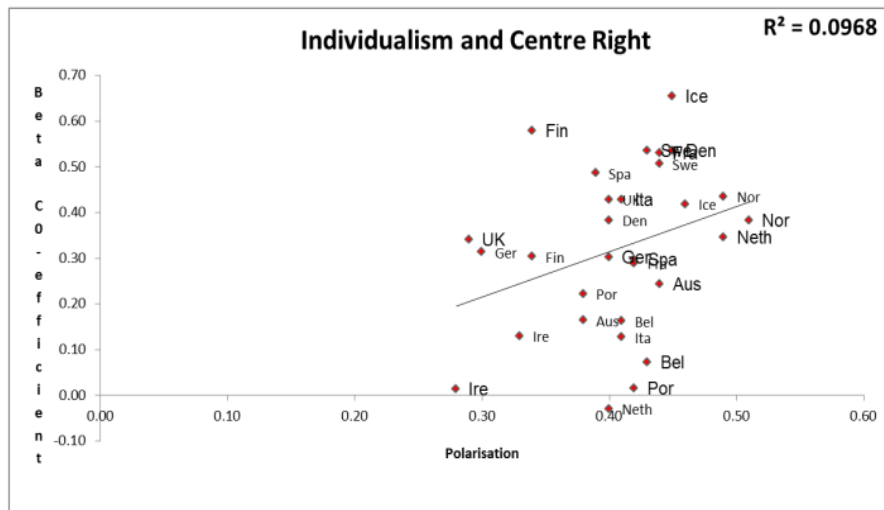
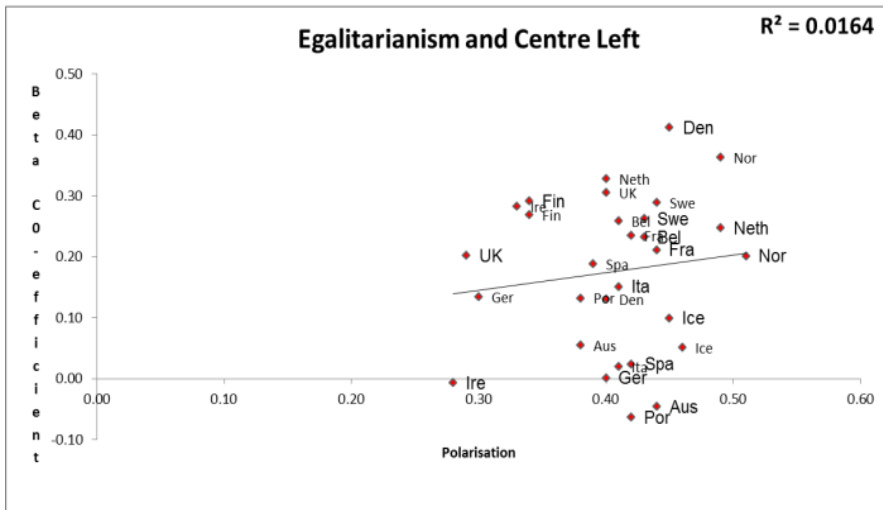
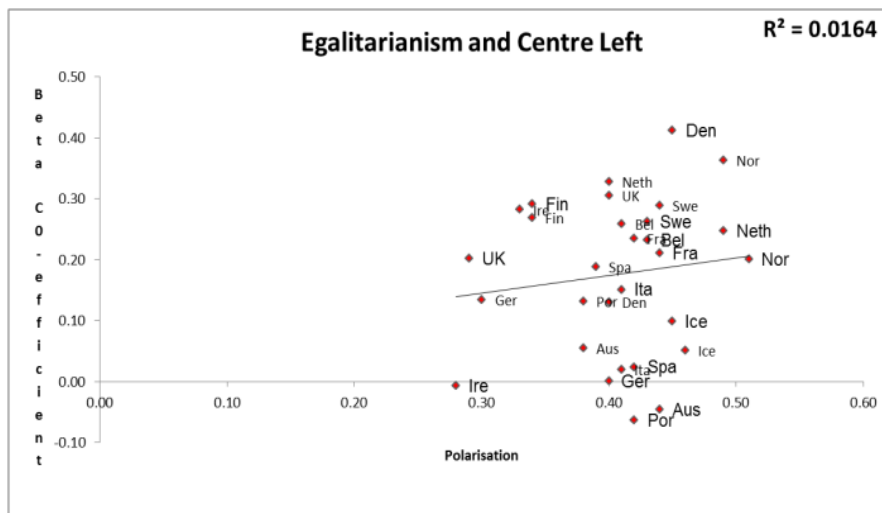
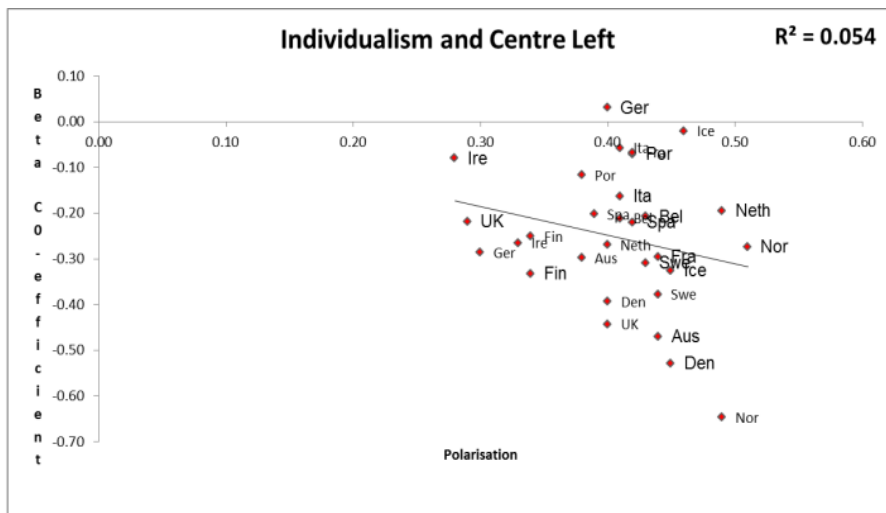
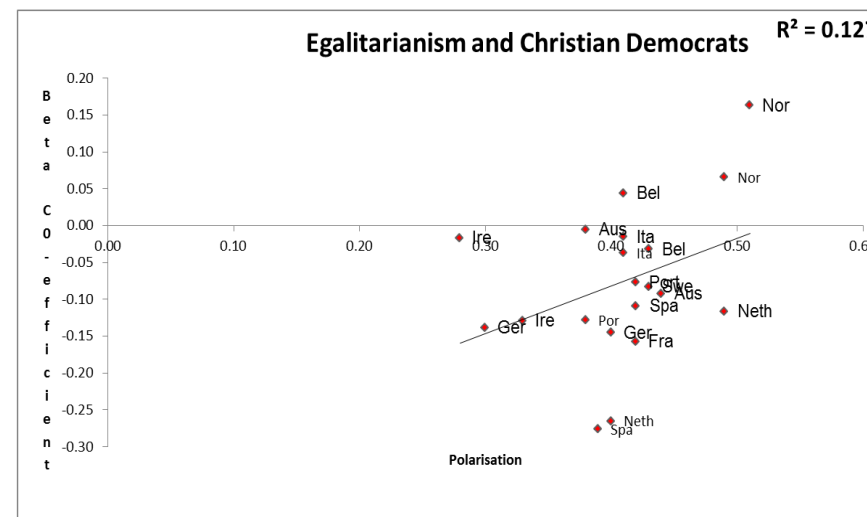
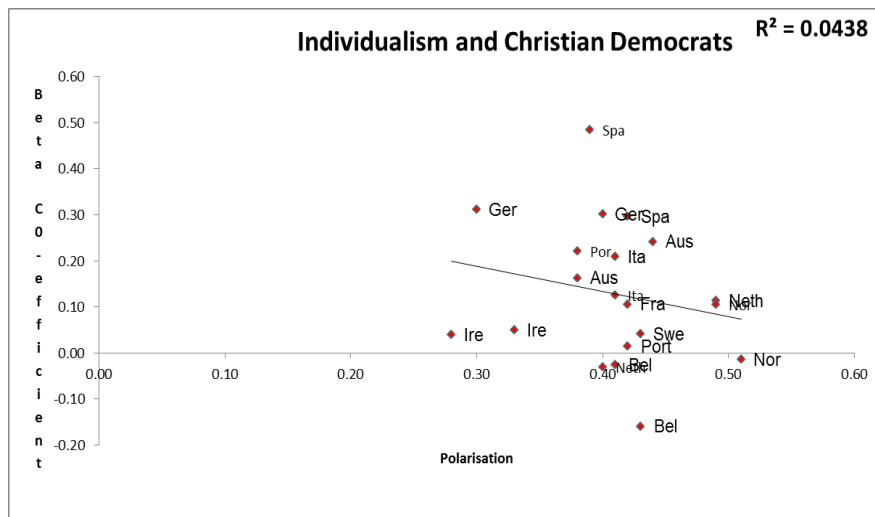
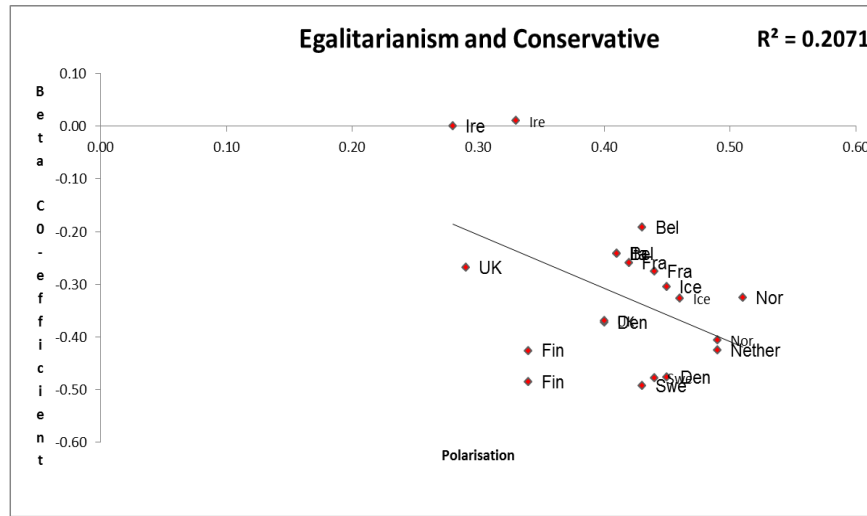
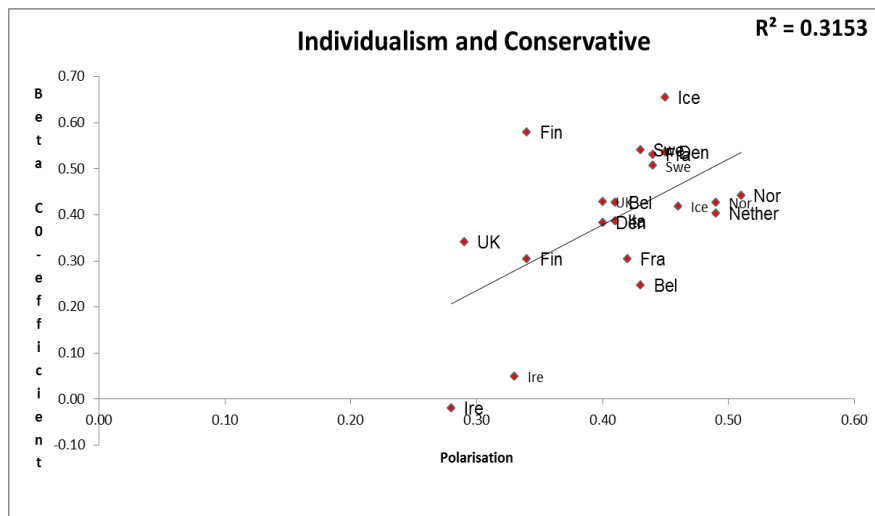


Figure 6.2 shows some relationship between polarisation and the effect of Individualism and Egalitarianism on the overall Centre Right vote. Polarisation would appear to increase the positive association between individualism and Centre Right voting and likewise increase the negative effect of Egalitarianism. Both effects, while weak, do suggest that the strength of values on voting is more likely to be influenced by polarisation for Centre Right parties than for the Centre Left. The reasons for these relatively weak effects in the combined Centre Right graphs are explained by splitting the Centre Right parties into their constituent families, where it can be seen that polarisation has a much stronger influence on the Conservative values vote than it does on the Christian Democrat vote.

Hypothesis 3 - *In countries with a higher level of polarisation there will be a stronger relationship between values and voting for mainstream parties of the right than of the left. **This hypothesis is supported.***

Figure 6.3 shows that the relationship between Individualism, Egalitarianism and the Conservative vote is quite strong. Polarisation clearly has the effect of strengthening the association between positive views of Individualism, negative views of Egalitarianism and Conservative voting. This effect is not evident for the Christian Democrat vote: on Egalitarianism and the Christian Democrat vote polarisation shows some evidence of working in the opposite direction. As a system becomes more polarised the negative association between Egalitarianism and voting for Christian Democrat parties declines: there are examples of a positive relationship between Egalitarianism and Christian Democrat voting in more polarised countries. Again, this has to be qualified by stating that the effect is small compared with the Conservative vote but it is substantively interesting and consistent with previous findings. One possible explanation for this effect is that more polarised systems may be more likely to have a Conservative Party within them which means the Christian Democrats are seen as more egalitarian in comparison. Nevertheless, the overall result of these findings suggests that the hypothesis regarding the influence of polarisation on right of Centre voting is broadly correct.

Figure 6.3 Graphs of Polarisation by the effects of 'Core Political Values' on Conservative and Christian Democrat Party voting.



As with other values, there is no evidence of polarisation influencing the relationship between Traditionalism and Centre Left voting. *Figure 6.4* suggests that Traditionalism does not act as a core political value for the Centre Left vote. In other words, Traditionalism does not necessarily differentiate vote preferences for Centre Left parties from Centre Right ones in the way in which Egalitarianism and Individualism do. It may be that the strength of Traditionalism on the vote is more likely to be defined by emphasis rather than differentiation. So, it is not a case of voters taking alternative positions on a competing values dimension but of emphasising that value more than others when deciding who to support. The only party family in which polarisation appears to have any effect on the relationship with Traditionalism is the Communist one. Polarisation appears to increase the negative association between Traditionalism and voting for leftist parties. There is only a very small effect of polarisation on Traditionalism and Christian Democrat voting. This adds some support to the theory that Traditionalism is a value that is likely to be relevant to voters through emphasis not differentiation and may not always map neatly onto left-right political divisions.

Hypothesis 4 - Polarisation will increase the strength of the relationship between values and the Conservative vote but not the Christian Democrat vote with the exception of Traditionalism. The first half of the hypothesis is partially supported but the second half is not.

These findings are further supported when looking at the effect of polarisation on the values-voting relationship for fringe party families. For Nationalist parties there is evidence that polarisation increases the strength of the positive association with Individualism, although it should be acknowledged that this is based on a considerably smaller sample size (see *Figure 6.5*). The finding for Egalitarianism appears more straightforward: as polarisation increases so does the negative relationship with the Nationalist vote. *Figure 6.5* shows the opposite to be the case among the Communist party models, at least as regards Individualism. In more polarised countries the negative association between Individualism and the Communist vote is increased. Interestingly, for the Green Party vote there seems little impact of polarisation on specific values, which suggests that despite the previous findings (showing a similar pattern in the Green and Communist values-voting Structure) parties with a Green profile do not necessarily benefit from increased polarisation.

Figure 6.4 - Graphs of Polarisation by the effects of Traditionalism on party voting.

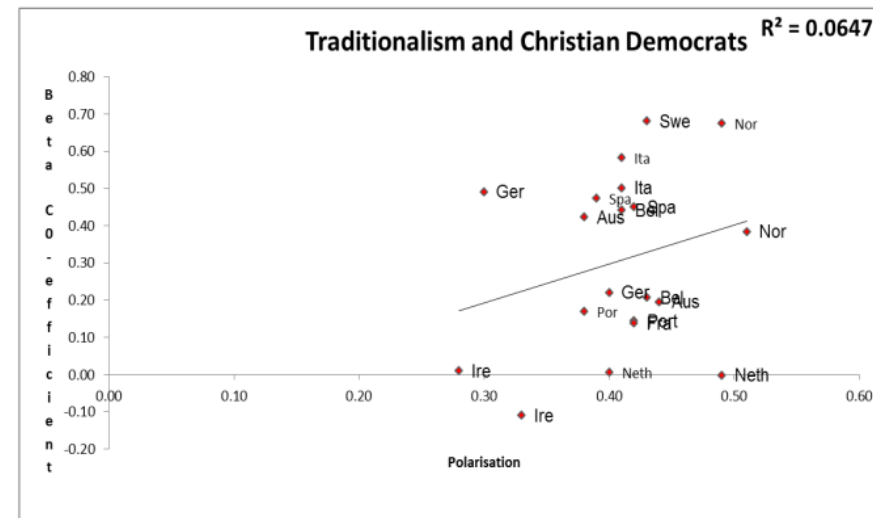
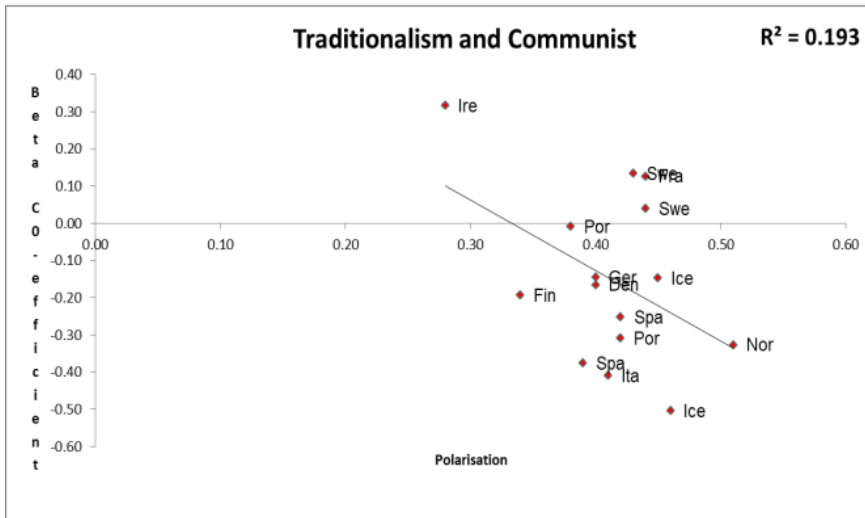
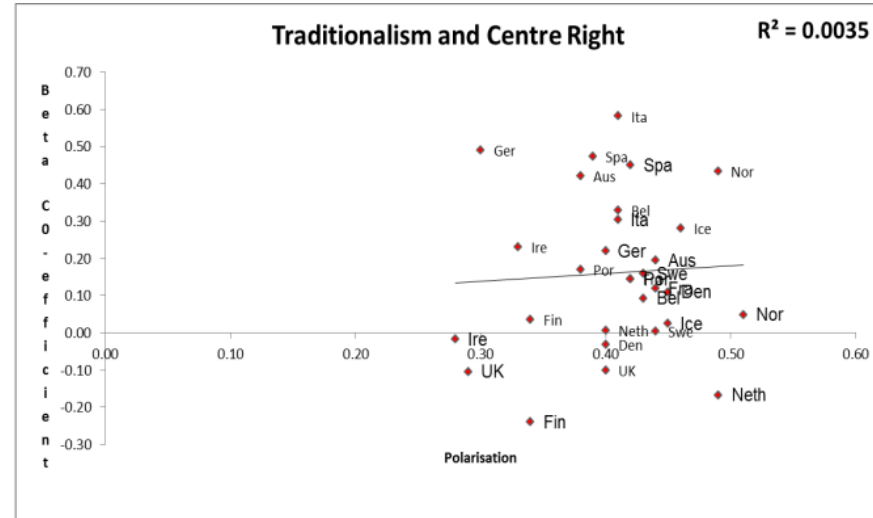
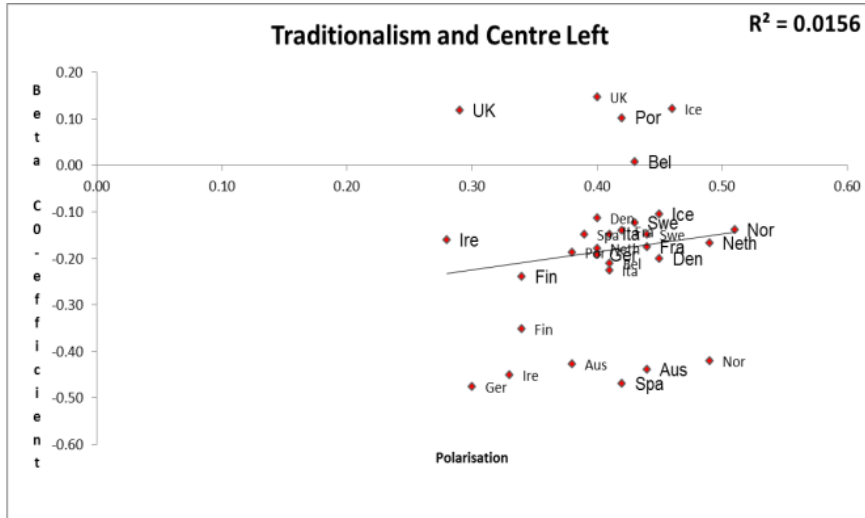
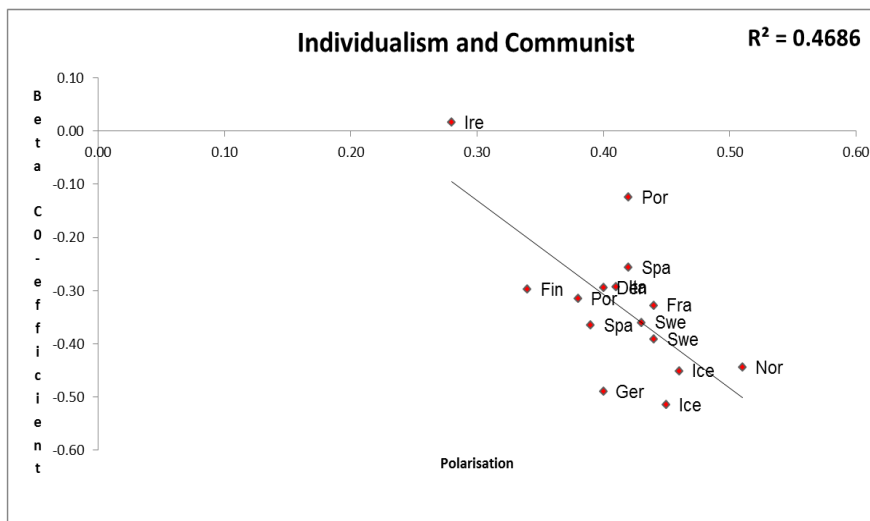
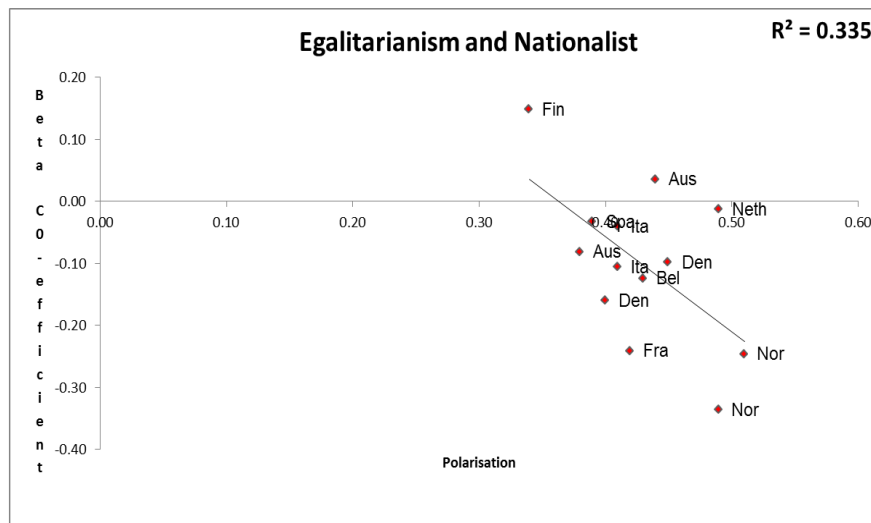
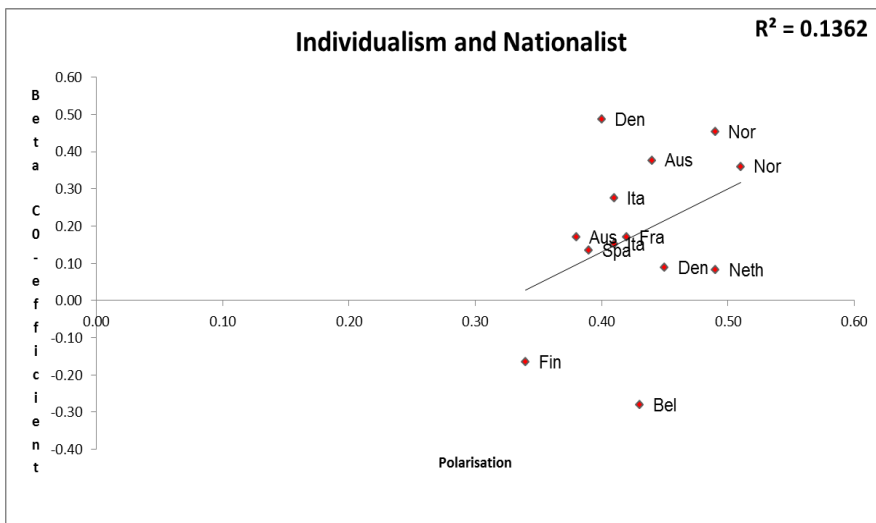


Figure 6.5 Graphs of polarisation by the effects of 'Core Political Values' on Nationalist and Communist voting.



Hypothesis 2 - *The effect of polarisation on the relationship between values and voting will be stronger for non-mainstream party families such as the Communists and Nationalists. **This is partially supported.***

Figure 6.6 shows that there is no clear pattern in the influence of polarisation for Authoritarianism. For Authoritarianism, it appears that polarisation has an influence on the Centre Right vote. However, when the Centre Right is split into its constituent parts that relationship is entirely driven by a cluster of more polarised Countries in the Conservative graph in which the relationship between Authoritarianism and the Conservative vote is negative. It is unclear why polarisation should result in a decline in the relationship between Authoritarianism and the Conservative vote. The relatively strong influence of polarisation on the relationship between Authoritarianism and Communist voting provides some further evidence that polarisation has a stronger influence on the role of values for parties that are further from the Centre. However, this finding is not repeated for Nationalist or Green parties. For Conformity, there are no effects of polarisation on the strength of the values-voting relationship with two exceptions. The Centre Right model exhibits no relationship for Conformity suggesting polarisation is not relevant to the strength of this relationship. But as is shown in Figure 6.7, the reason for this is that the effects of polarisation on the Conservative and Christian Democrat vote are pulling against each other. In the Christian Democrat models there is evidence that an increase in polarisation produces a stronger positive relationship between Conformity and the Christian Democrat vote. In the Conservative models the effect runs the opposite way – with an increase in polarisation decreasing the strength of the positive relationship between Conformity and the Conservative vote. This is interesting as it is the pattern that might have been expected for the influence of polarisation on Traditionalism. It is possible that Conformity acts as a differentiator of the vote between Christian Democrat and Conservative parties in more polarised systems.

Figure 6.6 Graphs of Polarisation by the effects of Authoritarianism on party voting.

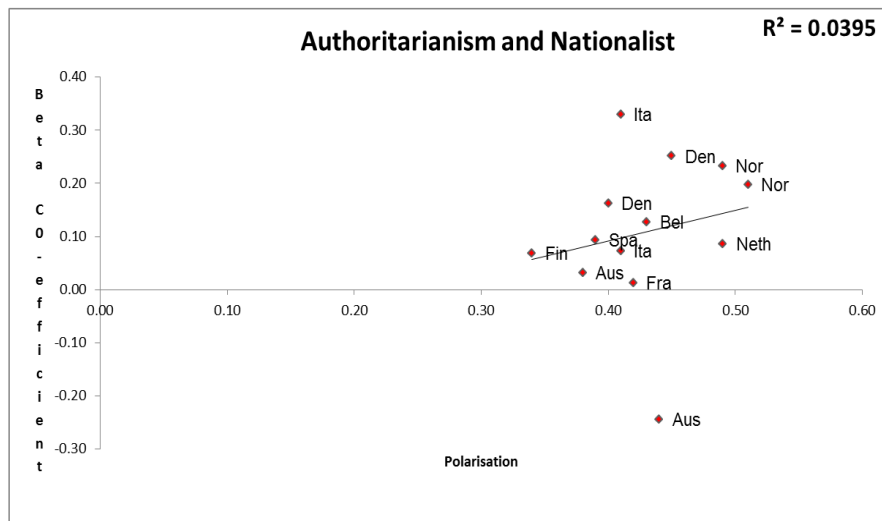
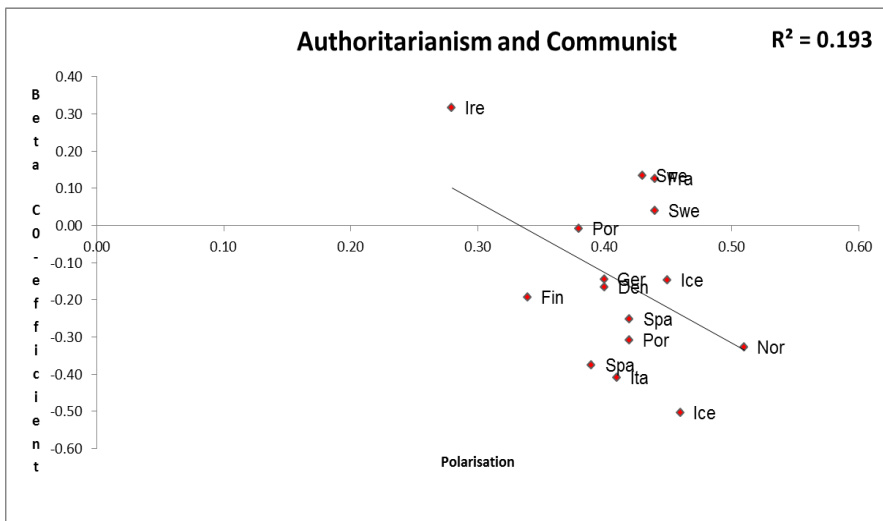
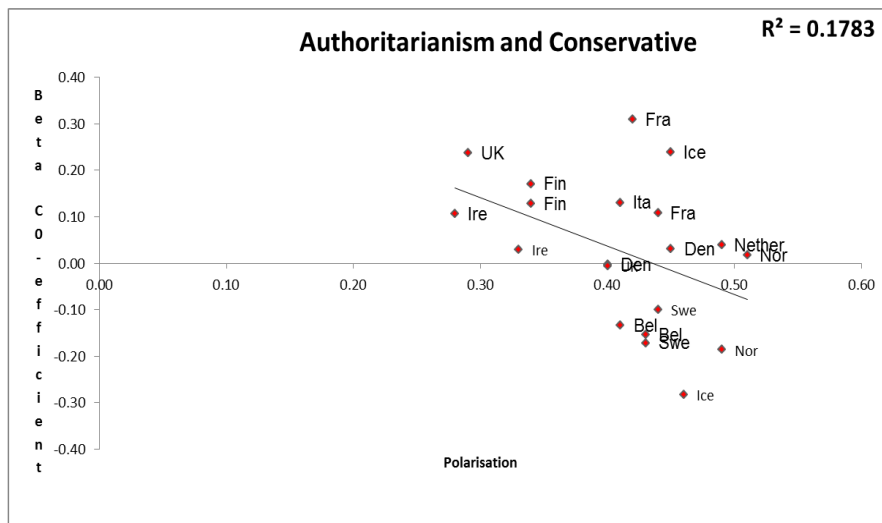
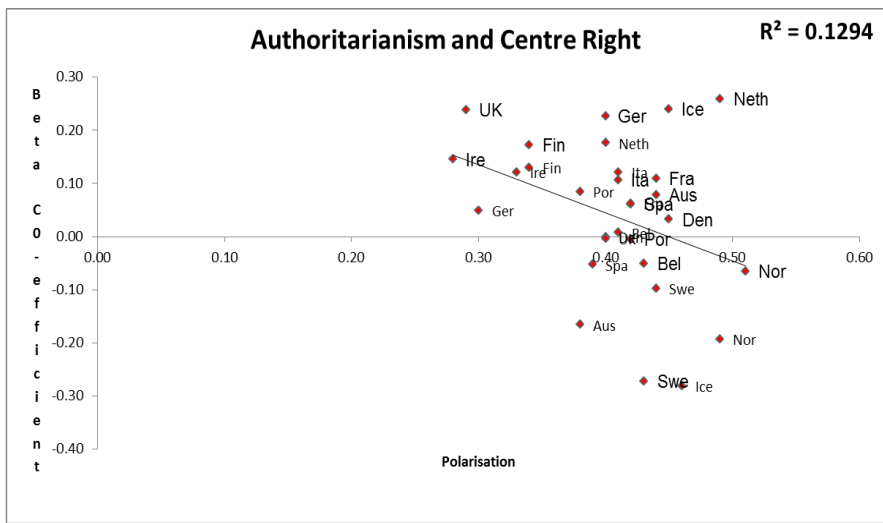
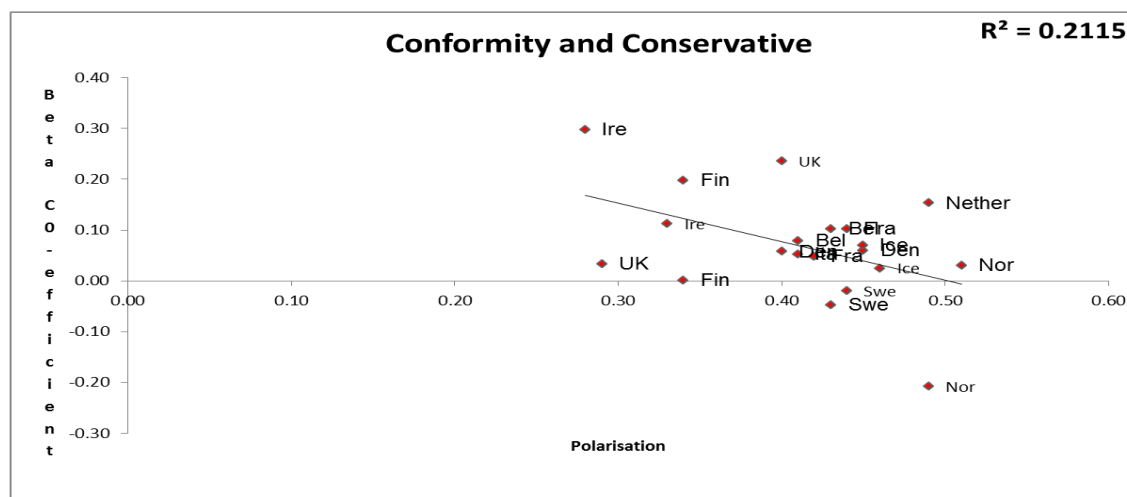
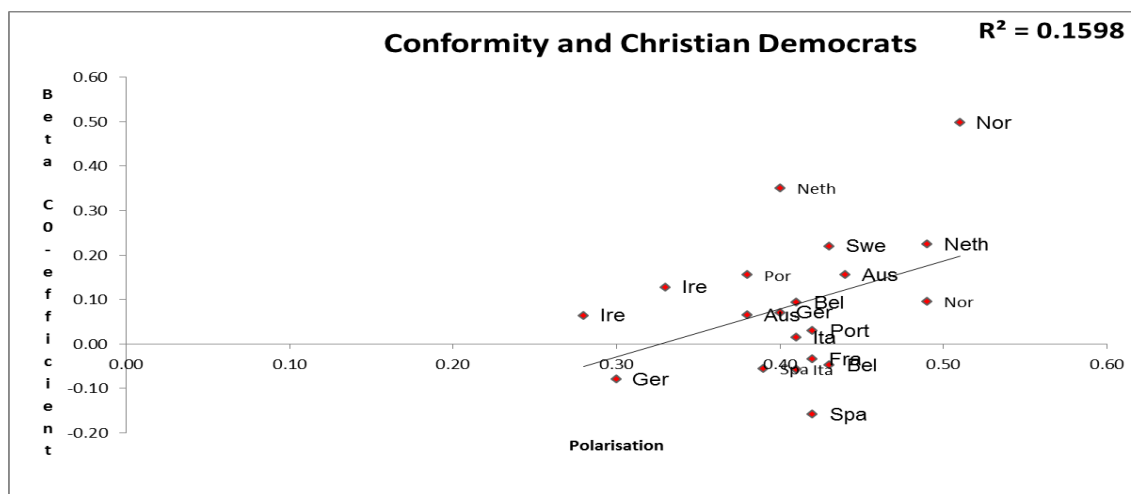


Figure 6.7 Graphs of Polarisation by the effects of Conformity on Christian Democrat and Conservative voting.



Effective Number of Parties

The analysis of the influence of the number of parties on the values-voting relationship suggests a null relationship. There is very little evidence of the number of parties having an influence on the values-voting relationship. The effects for the mainstream parties of the Centre are non-existent. It might be expected that with more parties in the system the strength of the relationship between values and voting for Centre Left or Centre Right parties may decline since they would be likely to have competitors making stronger values appeals. There seems no evidence at all to support this. The number of parties simply had no effect on the relationship between values and voting for any of the mainstream party models.

Figure 6.8 - Graphs of Number of Parties by the effects of values on Communist Voting.

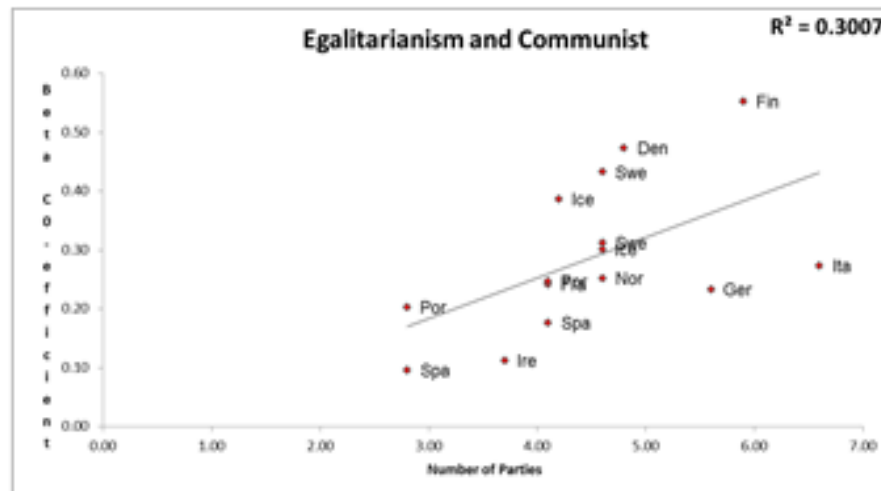
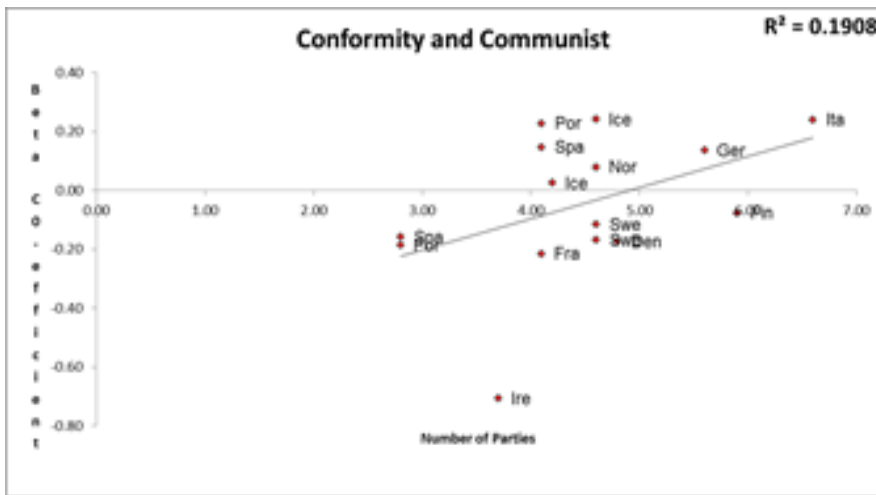


Figure 6.8 shows that where the effective number of parties had the most effect was on the Communist party vote. The effects are relatively weak but they show some quite interesting results as they suggest that as number of parties increases the relationship between Conformity and the Communist vote becomes positive. It is hard to claim that this finding is very robust given the number of outliers; it probably would not be of note if it were it not for the fact that a similar (though much smaller) counter-intuitive effect is found in the relationship between the number of parties and the Traditionalism-Communist vote relationship. The finding for Egalitarianism and the Communist vote is more predictable – as the number of parties increases the positive relationship between Egalitarianism and the Communist vote becomes stronger. It is possible that this reflects a trend of left parties picking up disenfranchised values voters from Centre Left parties. For example, the German 2008 model shows that there was no relationship between Egalitarianism or Individualism and voting for the SPD (see *Appendix 12*). Those core political values were no longer predictive of the vote for the main German Centre Left party (they were predictive in the 1990 Model – see *Appendix 13*). In the intervening time, the SPD had moved to the Centre as part of the third way wave of European Social Democracy, which created the political space for the emergence of *Die Linke*. This new party was partly made up of former members of the SPD who were unhappy with it abandoning its traditional leftist values (Bowyer and Vail, 2011). As might be expected, there was a strong relationship between Individualism (negative) and Egalitarianism (positive) with *Die Linke's* vote. However, overall it is difficult to identify an influence of ENEP on the values-voting relationship.

Hypothesis 5 - *In countries with a higher ENEP there will be stronger relationship between values and voting. This is not supported.*

Direct and Indirect Effects

The analysis has produced evidence to suggest that it is polarisation, and therefore the content of party competition, that drives the relationship between values and voting rather than the structure. The next stage of the analysis moves on to assess whether the observed effect of polarisation is derived from direct or indirect effects.

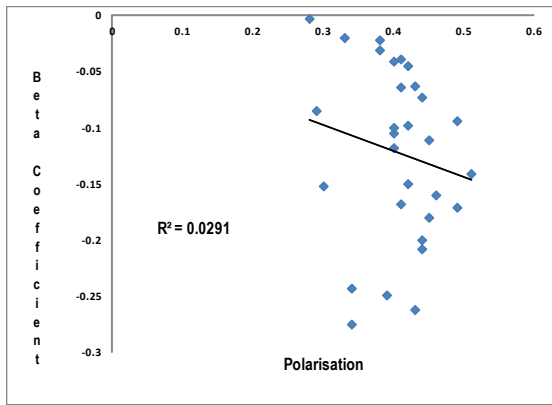
The analysis starts by looking at the two more political values in the model: Individualism and Egalitarianism. The nature of the political identities SEM model that has been estimated has left-right identity as the indirect mediating variable. It is therefore reasonable to assume that if contextual variation is driven by the indirect effects of political identity then it will be most evident in the findings for these values. It might be expected that in a more polarised party system for voters to have a

heightened sense of their left-right identity and that this would act as a stronger heuristic for allowing them to connect their political values to their party choices. However, the findings here do not support this theory and suggest a somewhat simpler and more direct relationship influences values voting.

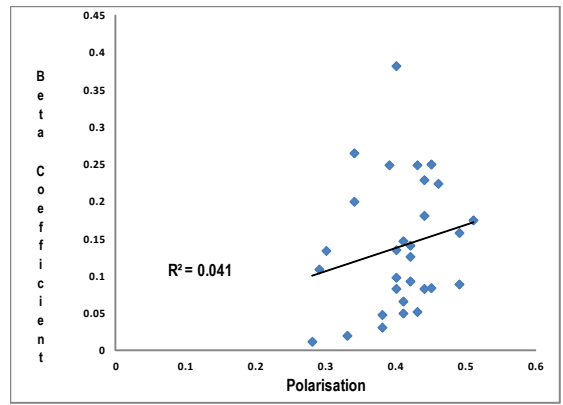
Individualism

The previous stage of the analysis indicated that increased polarisation is associated with stronger positive relationships between Individualism and Centre Right, Nationalist and Conservative voting. It also showed a relationship between increased polarisation and stronger negative effects of Individualism and voting for Centre Left and Communist party families. However, the effect on the Centre Left vote was small. This fits with a consistent pattern of polarisation having a weak to null influence on the values-voting relationship for the Centre Left party family. With the exception of the Nationalists, this influence of polarisation on Individualism is driven by the direct effects rather than the indirect effects. *Figure 6.9* shows that the indirect effects are weak. Polarisation appears to increase the indirect mediation effect of the positive relationship between Individualism and Nationalist voting and increase the negative indirect effect on Communist voting. There is a much smaller influence on the Conservative vote, which suggests that polarisation may produce a small increase in the positive indirect effect. It is clear that the effect of polarisation on the indirect influence of Individualism via left-right identity is negligible.

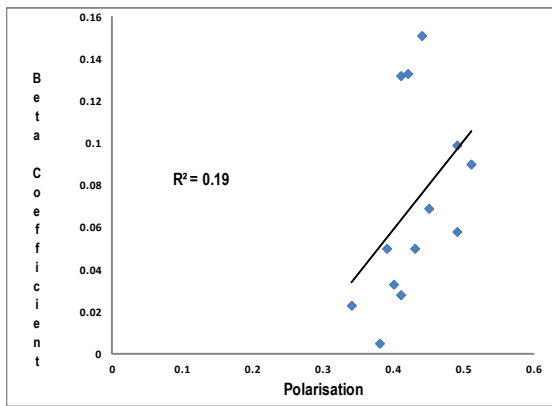
Centre Left



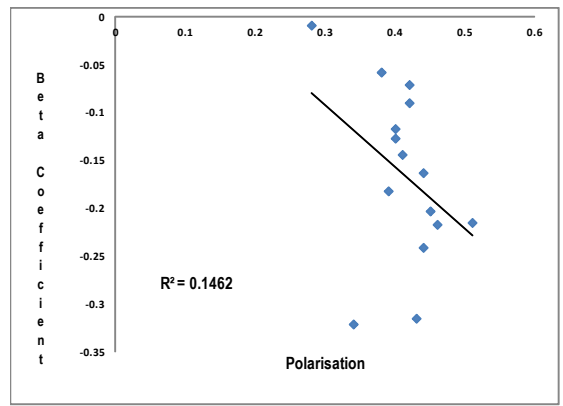
Centre Right



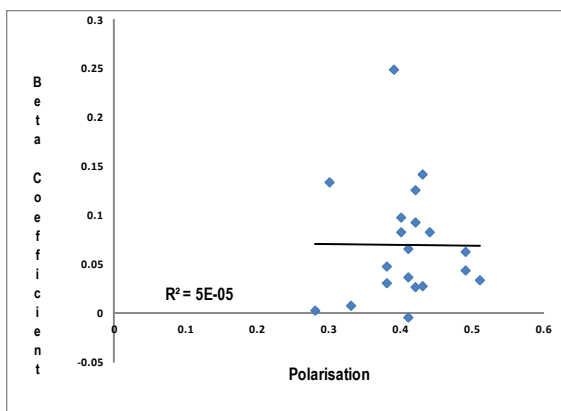
Nationalist



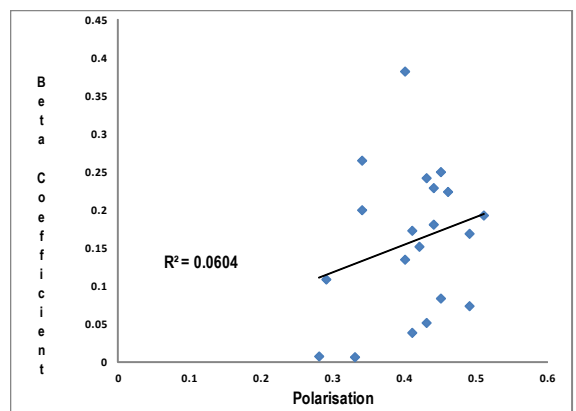
Communist



Christian Democrat



Conservative



Green

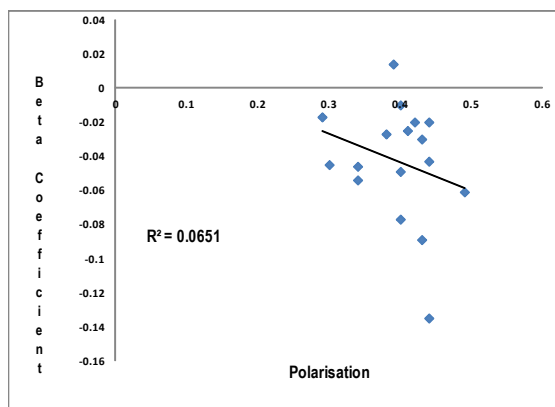
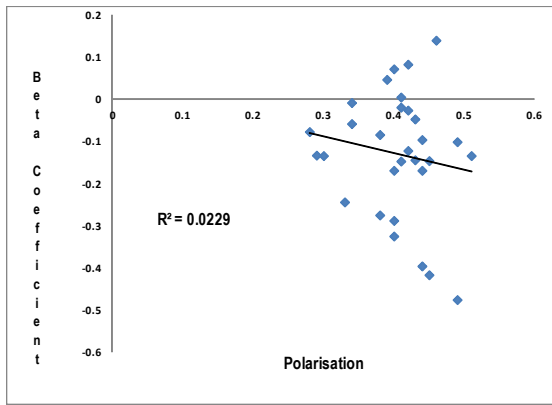


Figure 6.9 Individualism indirect effects

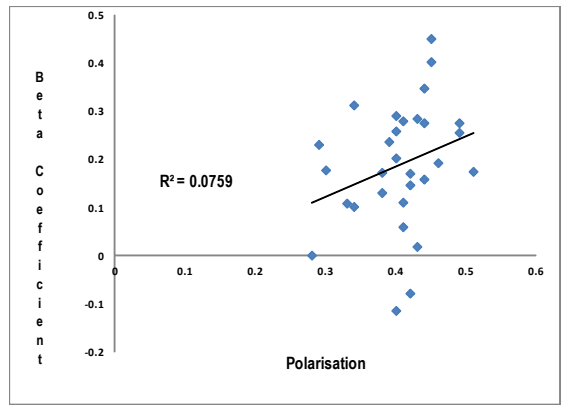
Figure 6.10 on the other hand shows that the direct effects between Individualism and vote choice are relatively strong. It suggests that polarisation can allow voters to make a direct link between values and parties but does not increase the use of left-right as heuristic to make that link. Polarisation appears to have a modest effect in increasing the strength of the positive direct relationship between Individualism and the Centre Right in general, and a strong effect on the Conservative party vote. Interestingly there is a small effect of polarisation on the direct relationship between Individualism and the Christian Democrat vote as well. However, this is negative: increasing polarisation appears to have the effect of decreasing the strength of the positive relationship between Individualism and voting Christian Democrat. This is largely the result of a cluster of cases in relatively highly polarised countries in which Individualism has a negative relationship with Christian Democrat voting. This is another example of the diversity in values preference between Conservative and Christian Democrat voters, which adds an extra layer to the variation that has already been found by suggesting voters for these two Centre Right families may react differently to contextual influences. The evidence suggests that in more polarised political systems the fundamental political value of Individualism becomes more important to Conservative voters.

For the Christian Democrat vote polarisation dampens and may even reverse the influence of Individualism. One further point to note is evidence of polarisation having a confounding influence on Individualism and the Green vote. The effects are small but there was a negative influence of polarisation on the indirect effect for the Green vote and a positive influence on the direct effect. The key finding is that, with the exception of the Nationalist vote the influence of polarisation on vote choice is via its influence on the direct effects.

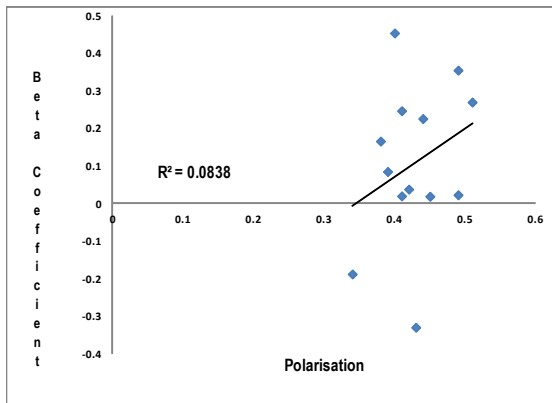
Centre Left



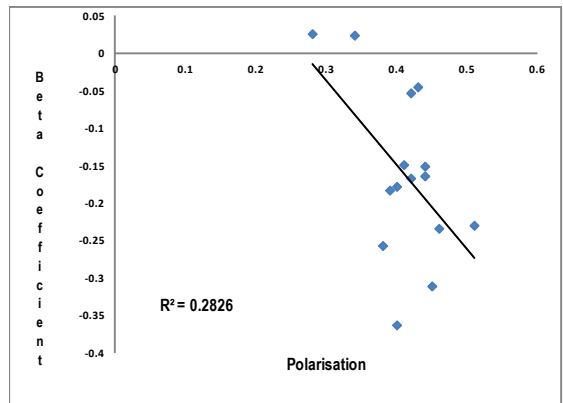
Centre Right



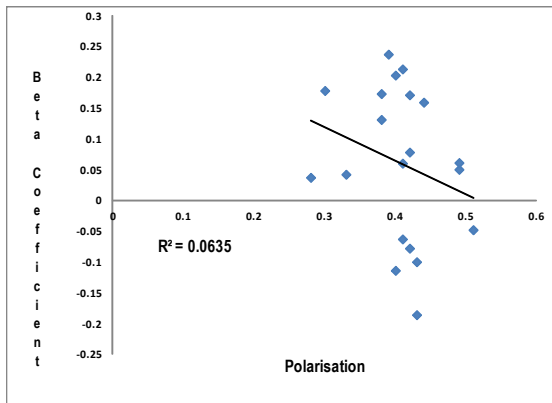
Nationalist



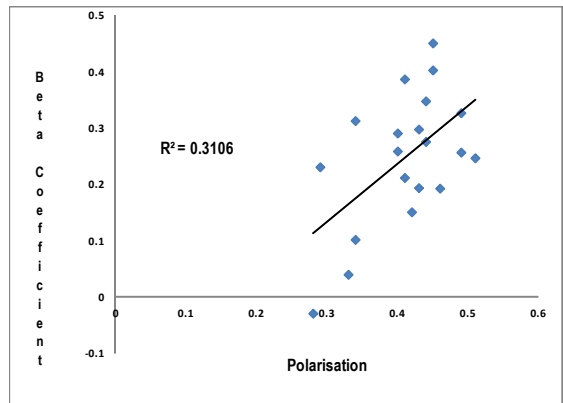
Communist



Christian Democrat



Conservative



Green

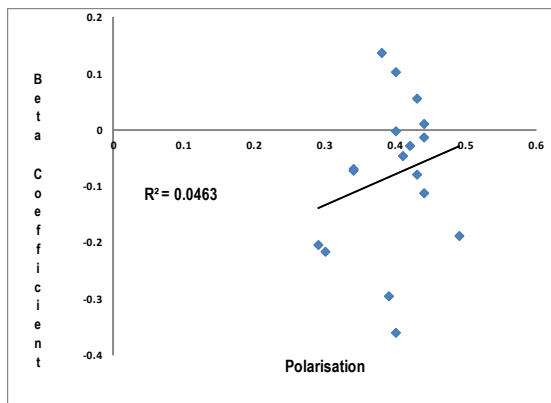


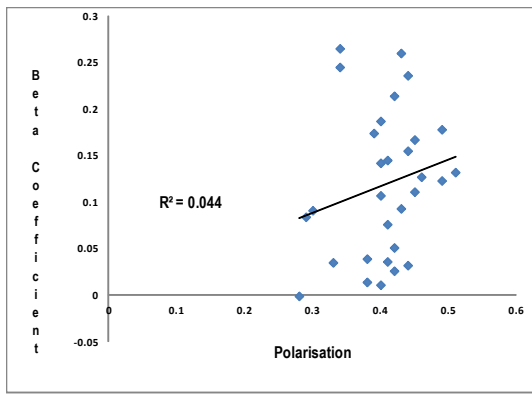
Figure 6.10 Individualism direct effects

Egalitarianism

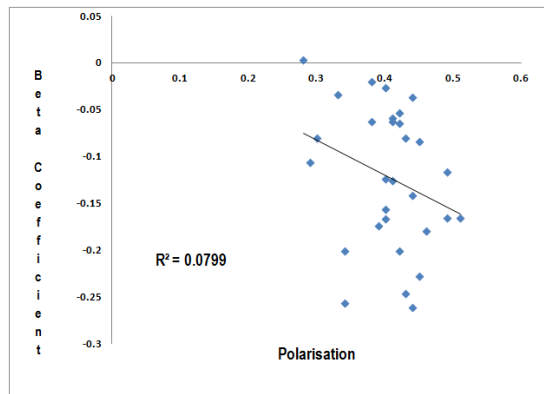
The findings for Individualism are largely repeated for Egalitarianism but with less impact on voting for left of centre parties. The previous stage of the analysis showed that polarisation influenced the total effect of Egalitarianism on vote choice for a number of parties. There was an increase in the strength of the negative relationship between Egalitarianism and the Centre Right, the Nationalist and the Conservative party families, and a positive relationship with the Christian Democrat vote. So, as polarisation increased Christian Democrat voters dropped their negative association with Egalitarianism and the relationship became a positive one.

Figure 6.11 demonstrates that there is very little evidence that polarisation influences the indirect relationship. There is a small negative effect on the Centre Right vote with increased polarisation. It is clear that this is driven by the influence of polarisation on the Conservative model, as there is no influence of polarisation on the indirect effect in the Christian Democrat model. The only other models in which polarisation appears to influence the strength of the indirect relationship is for the Communist and Nationalist party types. Increased polarisation is related to stronger positive relationships between Egalitarianism and in the Communist models and stronger negative relationships in the Nationalist models.

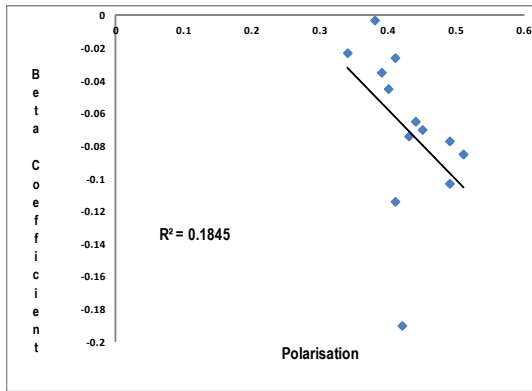
Centre Left



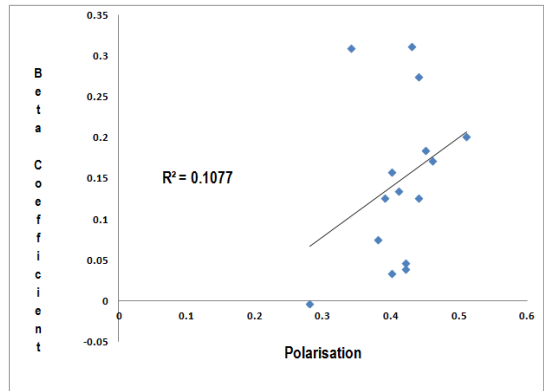
Centre Right



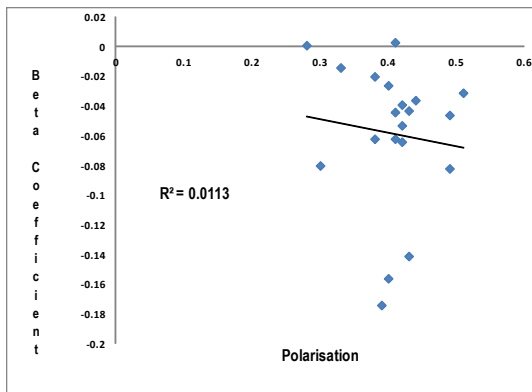
Nationalist



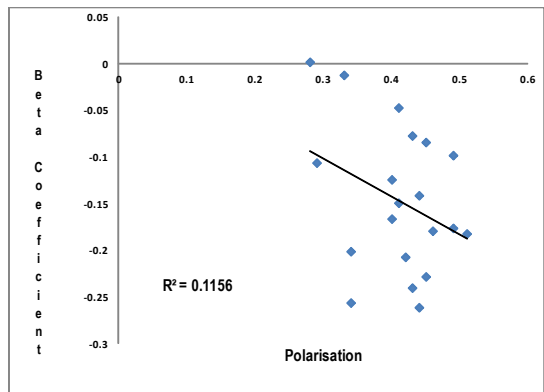
Communist



Christian Democrat



Conservative



Green

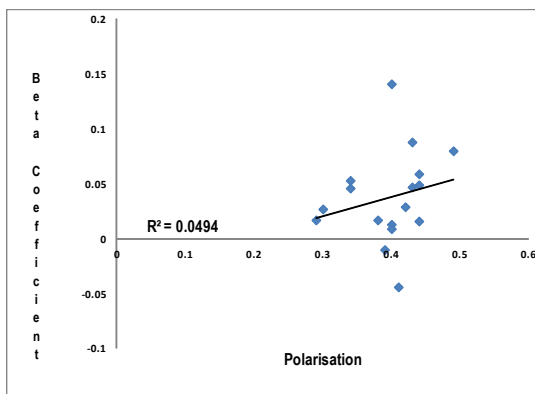
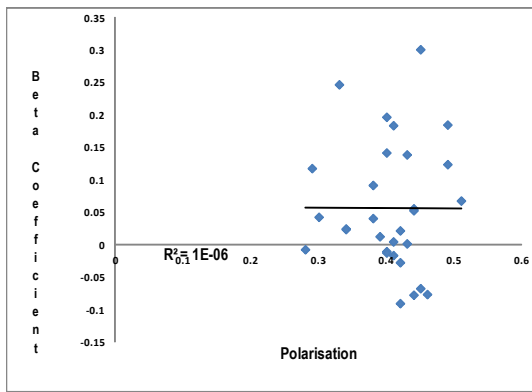


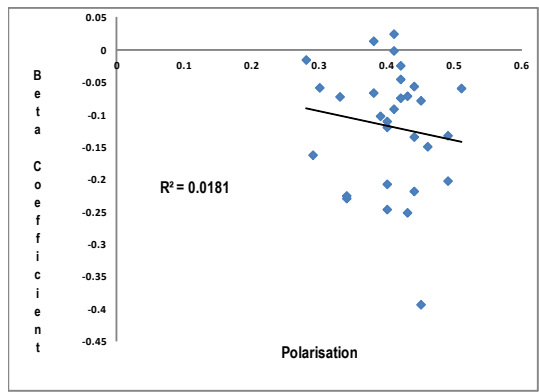
Figure 6.11 Egalitarianism indirect effects

The influence of polarisation on the direct effects is clearer and stronger, though it is non-existent for Centre Right and Centre Left party groups (see *Figure 6.12*). The reason that polarisation does not seem to influence the strength of egalitarian values on the Centre Right vote is that its constituent party families are pulling in opposite directions. Polarisation is related to a stronger negative relationship in the direct effect between Egalitarianism and the Conservative vote as would be expected. However, for the Christian Democrat vote the effect is positive and is one of the stronger effects in these models. As polarisation increases, the direct effect of Egalitarianism on the Christian Democrat vote moves from negative to positive. Polarisation appears to have no influence at all on the direct relationship between Egalitarianism and Centre-Left voting and a relatively small influence on Communist party voting. It only seems to be associated with variation in the effects of Egalitarianism on right of centre voting.

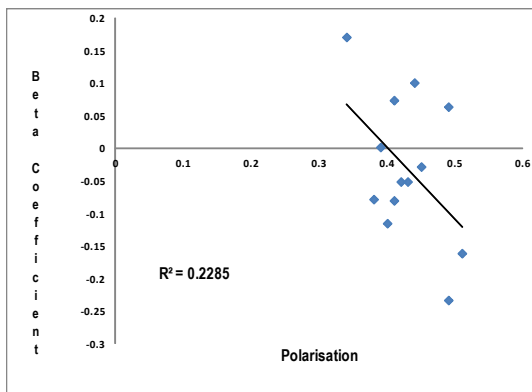
Centre Left



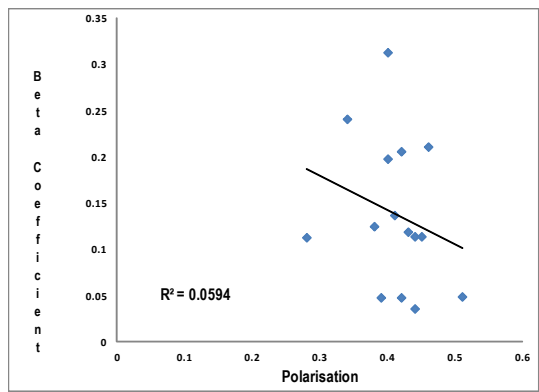
Centre Right



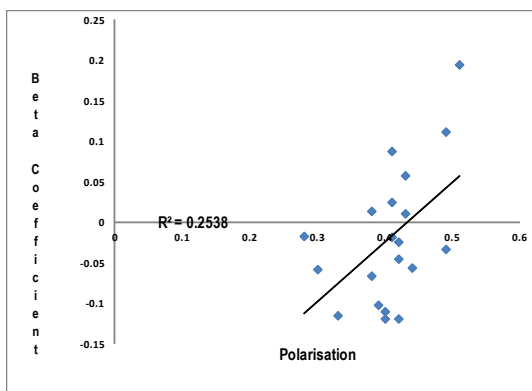
Nationalist



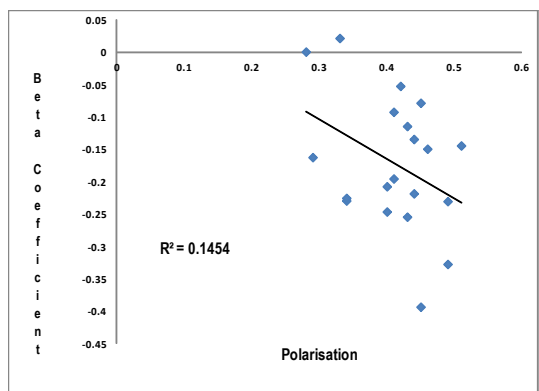
Communist



Christian Democrat



Conservative



Green

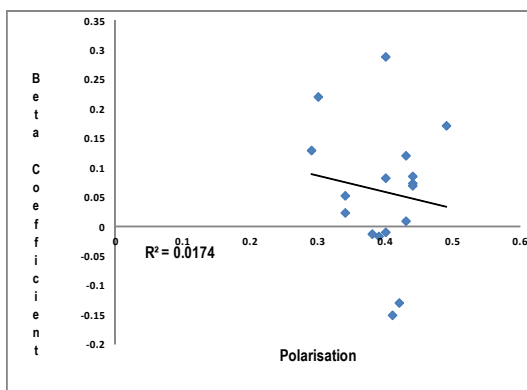


Figure 6.12 Egalitarianism direct effects

Traditionalism, Authoritarianism and Conformity

For Traditionalism, the model showed polarisation having very little influence on vote choice for all parties. It would appear that in general polarisation does not explain variation in the strength of the relationship between Traditionalism and vote choice. This is supported by there being no relationship found between polarisation and the strength of the indirect relationship between Traditionalism and the vote for any party family. *Figure 6.13* demonstrates that the influence of polarisation on vote choice for Communist and Christian Democrats parties is driven by the direct effects.

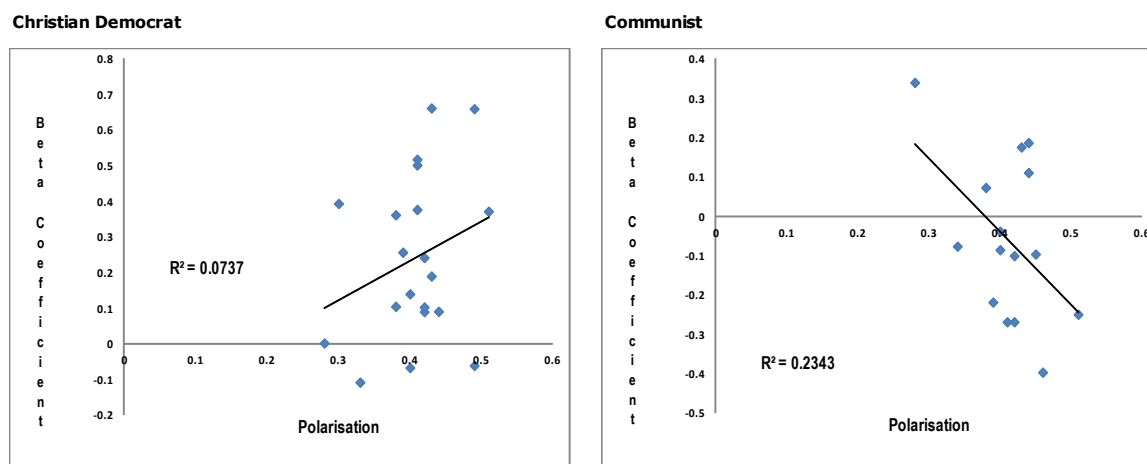


Figure 6.13 Traditionalism direct effects

For Authoritarianism, the total effects showed that polarisation had a negative association with Authoritarianism and Centre-Right voting, which switched the relationship from a positive one in less polarised countries to a negative one in more polarised countries. This seemed counter-intuitive. It was also demonstrated that polarisation was associated with stronger negative relationships with Authoritarianism and both Communist and Conservative voting. As with Traditionalism, there is no influence of polarisation on the indirect relationship between Authoritarianism and voting. *Figure 6.14* shows that the effect on the Centre right vote is entirely driven by polarisation leading to a decrease in the strength of the positive relationship between Authoritarianism and Conservative voting. In more polarised countries the direct relationship between Authoritarianism and Conservative vote declines to the point of becoming negative, whereas the indirect relationship stays positive in nearly all instances.

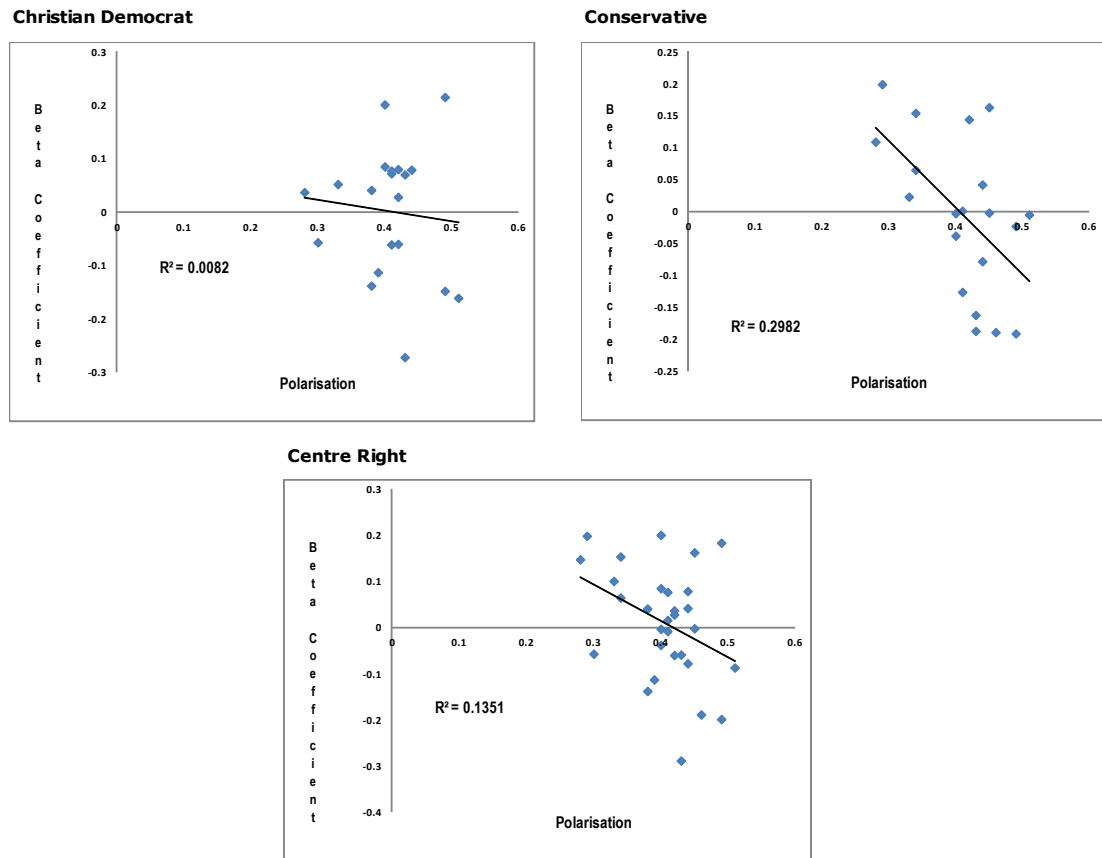
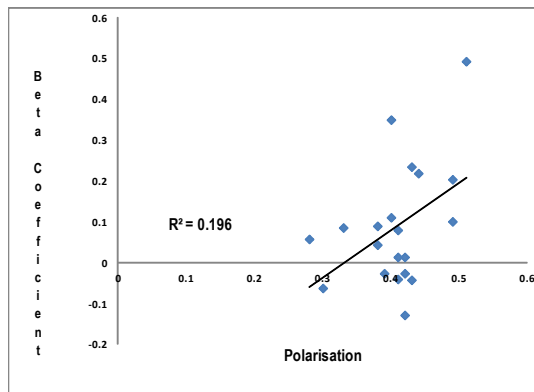


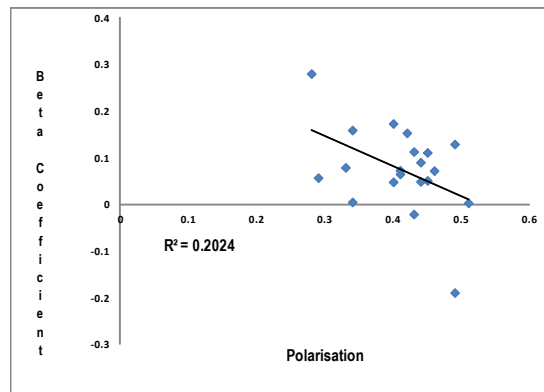
Figure 6.14 Authoritarianism direct effects

For Conformity there were 3 relevant total effects at stage 2 of the analysis: polarisation was related to increased strength in the negative relationship between Conformity and Nationalist voting. There was also further evidence of the Centre Right vote reacting differently to polarisation. Increased polarisation was related to increased strength in the positive relationship between Conformity and Christian Democrat voting and increased strength of the negative relationship with the Conservative vote. There is no evidence that polarisation influenced the indirect relationship between Conformity and vote choice. Therefore, the total effects are once again driven by the direct relationship, as highlighted in *Figure 6.15*. Polarisation appears to have a small association with the strength of the negative relationship between Conformity and Nationalist voting. It also accentuates the differences between the Christian Democrat and Conservative vote on Conformity. Increased polarisation is related to a stronger positive relationship between Conformity and the Christian Democrat vote and a stronger negative relationship between Conformity and the Conservative vote.

Christian Democrat



Conservative



Nationalist

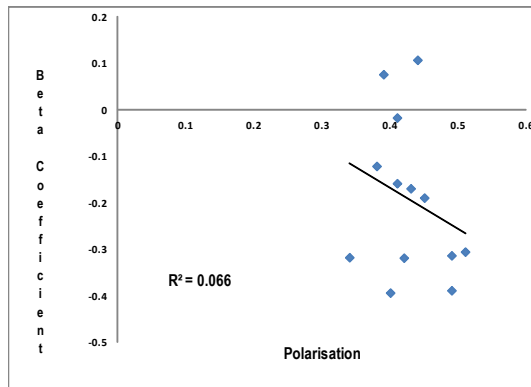


Figure 6.15 Conformity direct effects

Overall, these findings would appear to support the hypothesis that variation in the values-voting relationship is related to party system polarisation. Even for the more overtly political values in the model the influence of polarisation on direct effects dwarfed the indirect effects.

Hypothesis 6 - Changes in the strength of direct effects (the ability of voters to directly associate their values with a party preference) are the primary cause of party system influence on the values-voting relationship. **This hypothesis is supported.**

GLM Model

To test the generalisability of the findings the final stage of this meta-analysis estimates a GLM regression model to control for other contextual factors that may influence the values-voting relationship. The dependent variable is the r^2 value for each of the 165 party models that were estimated. GLM Gaussian logit models were estimated in *STATA* in order to account for the clustering in the dependent variable and for the fact that it is a bounded value. Further party system variables have been added to the model representing party size and age (the measurement detail was described in the previous methods section). In addition, party family types are also included in the model as categorical indicators. Centre Party is used as the reference

category. Finally, categorical indicators representing 4 regions of Western Europe are also included in the model. Nordic is the reference category as the descriptive findings suggested that the values model was particularly strong in those countries. The dependent variable in Model 1 represents the r^2 values from the models that have been used in the rest of the analysis which included left-right as a mediator for values. Model 2 tests whether these findings are robust by applying the same test to the r^2 values of models that did not include a left-right mediator. This is done in order to demonstrate empirically that the findings in this Chapter are not simply an artefact of including left-right in the model as a predictor.

Table 6.4 - GLM Models of r^2 values

	Model 1 (Mediator Included)	Model 2 (Mediator Excluded)
	Beta Coeff. (Std.Err)	Beta Coeff. (Std.Err)
Constant	-2.338 (0.242)***	-2.092 (0.255)***
<i>Party System Effects</i>		
Polarisation	2.266 (0.526)***	1.732 (0.510)***
ENEP	-0.217 (0.199)	-0.004 (0.020)
Party Age	-0.002 (0.002)	-0.001 (0.002)
Party N	0.008 (0.002)*	0.006 (0.002)*
<i>Party Family Type (Centre ref.)</i>		
Conservative	1.666 (0.142)***	1.317 (0.145)***
Christian Democrat	1.184 (0.138)***	0.913 (0.145)***
Centre Left	0.920 (0.146)***	0.603 (0.145)***
Nationalist	0.506 (0.145)***	0.331 (0.153)**
Communist	1.894 (0.123)***	1.176 (0.130)***
Green	0.913 (0.176)***	0.620 (0.172)***
<i>Region (Nordic ref.)</i>		
North Protestant	-0.086 (0.084)	-0.145 (0.087)
South Catholic	-0.363 (0.073)***	-0.646 (0.051)***
North Catholic	-0.758 (0.098)***	-0.532 (0.054)***
<i>n</i>	165	165
<i>r</i>²	0.46	0.38
AIC	-0.935103	-1.113044
BIC	-4179.448	-4221.32

Note: Standardised beta co-efficients reported.

*** = $p < 0.001$ level, ** = $p < 0.005$ level, * = $p < 0.010$

Table 6.4 demonstrates that the models support the key findings that have been set out above. Polarisation has a significant effect on the relationship between values and voting. Higher levels of polarisation predict a stronger influence of values on vote choice. ENEP has no significant influence on the strength of the relationship. Party age has a negligible impact on the relationship. There is evidence that values have a stronger association with vote choice for larger parties. This may reflect the findings

for party family type, which show that values are a significantly stronger predictor of the vote for all party family types compared with Centre parties. But it also highlights the stronger effects of values for the Conservative and Christian Democrat vote compared with other parties. The Communist party group may show the strongest influence on the values-voting relationship but the performance of the Conservative and Christian Democrats in the model provides additional support for the theory that values have a stronger influence on Centre Right than Centre Left voting. The regional controls suggest that there is a Catholic – Protestant values divide which is consistent with Inglehart and Welzel's (2005) national values typology. There would appear to be a significantly weaker relationship between values and voting in the two Catholic regions compared with the Nordic reference category. The effect for the North Protestant region is not significant, which suggests that values have similar effects in the two Protestant regions. There are no substantive differences in the results of the 2 models, which suggest that the findings are not just a result of the influence of the left-right variable. It is therefore possible to be reasonably confident that the GLM models are valid and provide further robust confirmation of the generalisability of the findings related to the values-voting mechanism.

Discussion

This chapter has attempted to contribute to the understanding of the role of values on voting by measuring how this relationship can be influenced by political context. This was tested following approaches laid out in recent electoral choice research (Knutson and Kumlin, 2005; Dalton and Anderson, 2010; Evans and De Graaf, 2013). In this instance, the influence of party system polarisation and the number of parties available to the electorate have been analysed. The influence of the number of parties on the values-voting relationship was found to be minimal: there is no evidence in this analysis suggesting that a greater number of parties increases the strength of the effect of values on vote choice. Polarisation, however, was shown to have an impact on the influence of values on voting. This provides robust confirmation of the influence of polarisation from previous analysis using 6 Northern European countries (Knutson and Kumlin, 2005). The findings are substantively interesting and do suggest that party positions matter to the ability of voters to connect their underlying values to their choice. Yet, these effects also add to the previous exploratory results by showing considerable variation. The findings were not straight forward or universal across all values and party types. This would appear to be consistent with a political choice perspective on understanding influences on voting behaviour (Evans and De Graaf, 2013). The findings broadly suggest that polarisation of the party system makes it easier for voters to associate parties with their specific values preferences. This is particularly the case for parties that are situated further away from the political centre. There is also considerable evidence that polarisation has a larger influence on

the values-voting relationship for parties with a right of centre profile than a left of centre profile. This is consistent with recent findings suggesting that values play a more central role in right of centre voting and that right of centre parties are more effective at priming the values of their voters (Goren, Federico and Kittilson, 2009; Haidt, 2012). The results demonstrate how supply-side factors may impact the values-voting relationship. It is significant that the analysis suggests that it is the content of political competition that matters to the values-voting relationship – not the structure of it.

These findings connect with two broader debates in the electoral studies literature. In the first instance it suggests that political polarisation may make it easier for voters to connect their values to their preferences: particularly if those values are more overtly 'political' (Petersen, Slothuus and Togeby, 2010). This links with findings that suggest it is the content of electoral preferences which is most important to voters, particularly when considering issues of personal identity (Dalton, Farrell and McAllister, 2011). One aspect that needs to be explored in further research is whether these contextual influence on the values-voting relationship are entirely driven by the politically knowledgeable or if values provide a heuristic that transcends levels of political understanding (Van Deth and Scarbrough, 1995b; Jacoby, 2006). This would contribute to the ongoing debate around Converse's contention that individuals do not structure their preferences in a meaningful way and therefore struggle to make political decisions that are congruent with their underlying belief systems (Converse 1964). In addition, the finding that polarisation has a greater influence on the role of values in predicting the vote for parties away from the political centre and with a clearer profile connects with the literature on new social cleavages and de-alignment (Kriesi *et al.*, 2008, 2012; Ford and Goodwin, 2014). If mainstream parties struggle to appeal to the core values of voters then this creates opportunities for new parties to emerge that do (Bowyer and Vail, 2011). These findings suggest that the appearance of new parties that can appeal to the core values of voters present a longer-term challenge to mainstream office seeking parties of the Centre.

The chapter has also established that polarisation primarily influences the direct relationship between values and voting rather than through left-right identity. This should be qualified; it is clearly likely that some values are mediated through other forms of identity. For example, there is good reason to think that values such as Traditionalism, Conformity and Authoritarianism are more likely to be mediated by forms of religious identity rather than political identity (Lipset and Rokkan, 1967; Raymond, 2011). However, the fact that the effects of polarisation on Individualism and Egalitarianism were also largely influenced through direct rather than indirect effects, does suggest that in more polarised systems voters find it easier to identify parties that reflect their values. This contributes to the normative debate in political

science: the extent to which polarisation is desirable. The original reason values were considered worthy of study in electoral studies is that democratic politics was considered to be about the peaceful settling of values based disputes (Easton, 1953). The evidence here suggests that increased polarisation (as defined by the extent of left-right division within the party system) also increases the importance of values. This is also shown to be uneven: there appears to be a stronger influence on right of centre parties than left of centre parties. Therefore, further discussion is required about the normative importance of values and whether increased polarisation is desirable to the extent that it allows voters to connect their values to their choices or whether this is likely to lead to a de-stabilising effect. The final concluding Chapter will focus on putting the overall findings from the four empirical chapters into that normative context. It will also summarise how these findings contribute to an increased understanding of the contextual influences on the values-voting relationship.

Chapter 7 Values and Voting in Context

Contribution

This thesis has aimed to make a contribution to the expanding literature on the relationship between the values of voters and their individual vote choice decisions. Specifically, it has aimed to address a gap in the cross-national research literature on the relationship between political values and voting. The primary analysis has attempted to provide a cross-national exploration of this relationship with the aim of providing insights into the contextual mechanisms that define the values-voting relationship. In doing so it is building on prior work in three aspects of this literature. Firstly, it connects with the literature on values measurement by attempting to extend the measurement of political values structures so that they can be applied in a cross-national comparative analysis. In this sense, it aims to make a minor methodological contribution. Secondly, it builds on the literature related to the mechanisms through which values influence vote choice by measuring the impact of left-right in mediating the relationship between political values and voting in a cross-national analysis. With regards to these two aims, the study has attempted to apply insights from cross-national research within the Schwartz individual values literature to the methodological approach that has been used in the wider political values literature at a single country level. Thirdly, the study has attempted to provide an assessment of the influence of political context on the values-voting relationship. By looking at these contextual influences in a cross-national analysis the study considered an aspect of the values-voting relationship that is recognised as substantively relevant but has received little previous attention in empirical research. By adopting this cross-national approach, incorporating measures of political context, to analysing the relationship between political values and voting the study is taking advantage of one of the key benefits that values are considered to offer social science researchers – namely providing significant purchase on exploring the micro-macro link (Hitlin and Piliavin, 2004).

Elections have sometimes been theorised in classical accounts of democratic politics as having a core role in allowing citizens to peacefully resolve conflicts between competing visions of society and interest groups (Easton, 1953; Beetham, 1999; Dahl, 2000). This relatively idealistic view of democratic politics implies a major role for the influence of values in representing 'competing conceptions of the good' (Tetlock, 1986, p.820). This approach implies a central role for elections as primary arenas for value conflict and suggests that one significant function of voting is in representing a form of values expression. Values are a more universal construct than ideology, even in their political form (Hug and Kriesi, 2010). Voters are more likely to use values as guides to decision-making in other social spheres, whereas ideology largely remains

constrained within the political world (Rokeach, 1973). The interaction between values and voting is therefore more likely to exhibit dynamic features of interaction between the supply and demand sides of electoral politics because values are more 'up for grabs'. There is not an automatic relationship between values and political allegiance. This study has attempted to consider intervening variables on both sides in a cross-national context. On the demand side, it has looked at the impact of left-right identity as an important mediating heuristic that allows voters to convert their values into meaningful political choices through a wider sense of their own political identity. It has also considered the roles that the supply side may have in framing the values-voting relationship through aspects of the party system. In taking this approach, the most substantively interesting finding this analysis has suggested is that the content of political competition is more significant in defining the importance of values than the structure of that competition. In other words, the political culture is potentially of more importance than the institutional structure. This connects with a political choice perspective that emphasises the importance of the supply side context in framing the environment in which voters make their choices. It implies that the political context shapes when and how values are likely to be important to vote choice decisions. This study has been able to contribute to this understanding in the three ways outlined below.

1. Providing cross-national measures of latent political values.

The first contribution the study makes is to apply a latent political values approach to studying voting in a cross-national comparative analysis. Previous cross-national research on values and voting has fallen into two categories. The first used broad single items or unidimensional indicators of behaviour and political identity as proxies for studying the influence of value change on political behaviour. This incorporates a diverse range of work from Inglehart's Postmaterialism (1971, 1997), to studies of the decline of institutional deference (Dogan, 1998; Raymond, 2011), to work that looks at broader trends in political allegiances over time (Van Deth and Scarbrough, 1995a; Knutsen, 1995b). The focus of this work is very much on changing aggregate trends across countries rather than cross-national variation in the association between values and voting. The second category uses the Schwartz values to explore the relationship between underlying values and aspects of social and political behaviour (Schwartz, 1992; Caprara *et al.*, 2007; Aspelund, Lindeman and Verkasalo, 2013). The challenge in applying this approach to specifically analysing voting has been the holistic nature of the values structure: they are not overtly political values and, as Leimgruber (2011) claimed, may underestimate the overall influence of values on voting. The focus is generally on cross-national similarity in the relationship between values and political behaviour that reflects the universal nature of the values measure (Barnea, 2003). As they are not political values the Schwartz approach also tends not to consider a core

aspect of political competition: namely negative voting. In other words, it is harder for the Schwartz values to capture the way in which a political preference can be formed as much through a strong rejection of a particular party, policy platform or set of values as through a positive association. Conversely, due to data limitations and research focus, the core political values literature has generally been limited to the analysis of individual countries, usually the United States (McCann, 1997; Feldman, 2003; Feldman and Johnston, 2014). As a result, while this approach clearly reflects the nature of electoral competition and has been able to make many key insights into the development of political competition and the underlying role values have in this, it has generally not been able to take into account variation in the relationship between values and voting in different contexts.

This study has attempted to steer a middle ground between the core political values approach and the Schwartz approach. It has retained the direct relevance to political competition that is provided by the core political values approach while demonstrating that it is possible to apply this strategy on a cross-national basis to explore the values-voting mechanism. This allowed insights to be offered into the nature of value based political competition by demonstrating variation in the nature of the relationship between political values and voting across different country level contexts and party family types. Firstly, it uses cross-national measures of political values that are sufficiently multi-dimensional to demonstrate variation in the relationships between party family vote preferences in different countries and at different time points. Subsequently, this gave the study sufficient purchase when considering the influence of political context on the relationship between political values and voting. Secondly, the core political values demonstrate negative associations between values and voting, which captures a core aspect of political competition in cross-national comparison. This aspect of the values measures proved particularly fruitful in highlighting substantial variation in the values-voting relationship between the voters of similar party families, such as the Conservatives and Christian Democrats. Therefore, applying a multi-dimensional measure of political values to cross-national research has proved a viable approach that opened up potential avenues for researching the relationships between values and party competition across a wider range of electoral arenas.

2. Assessing the role of left-right political identity in mediating the influence of political values on voting.

This part of the analysis complements the existing cross-national literature in this area and makes a contribution by estimating the role of left-right as a mediator on the political values-voting relationship. Previous cross-national work has looked at the extent to which values underpin left-right political identities and aspects of political

ideology (Pioro, Schwartz and Davidov, 2011; Aspelund, Lindeman and Verkasalo, 2013). There is substantial work in the Schwartz literature that proposes various pathways between values and vote choice. One of the more important recent works tests the role of political values in mediating the relationship between the Schwartz values and vote choice (Schwartz, Caprara and Vecchione, 2010). This approach proposed a causal chain in which individual values provide the underlying structure for political values which then predict vote choice. This complements other work which suggests further causal mediation chains between values and voting, including personality traits (Caprara *et al.*, 2007) and leadership effects (Vecchione, Gonzalez Castro and Caprara, 2011). This study does not dispute this approach or the contribution of these mediators. Instead, it has aimed to take insights from this form of analysis and apply them to studying political values as opposed to individual values. The Schwartz approach, (Schwartz, Caprara and Vecchione, 2010; Caprara *et al.*, 2006) situates political values (defined in more issue specific terms than the measures used here) as a key mediator of the relationship between individual values and vote choice. This is important for showing how values act as underlying organisers of political preferences. However, it has been argued that this is less convincing in demonstrating how underlying values act as organisers of political competition (Leimgruber, 2011). This is because it makes an implicit assumption that the concept of left-right only becomes relevant at the level of party competition. Given the central role of left-right as a heuristic in the political culture of democratic politics in most established democracies, it appears reasonable to assume a voter's sense of their own left-right identity would play an important role in associating their values with their vote preferences. Therefore, this study makes a contribution to this literature by measuring the influence of left-right as a mediator of political values on voting in a comparative cross-national analysis. It makes no claims that left-right is the only mediator of this relationship; nor does it claim to establish a definitive causal path; other identities and factors could well prove to be stronger mediators of this relationship particularly in specific political contexts. Nevertheless, in estimating this structural pathway in a comparative analysis the study has been able to highlight additional complexities and variations in the values-voting relationship, particularly with regard to the capacity of this relationship to vary by political context. In doing so it further demonstrates the key role that values have in highlighting variation in the underlying dimensions of party competition.

The analysis was able to highlight the role of left-right as a mediator and as a confounder of the relationship between political values and voting. While it is true that in many cases the direct effect of values on voting dwarfed the indirect effect, the indirect effects that are exhibited were substantively relevant. The specific headline finding in this regard was the discovery of consistent confounding effects in the influence of values on Conservative party family voting. These findings at the pooled

data level showed that positive relationships between voter's core political values of Traditionalism, Conformity and Authoritarianism were only consistently positively associated with Conservative voting through their sense of left-right identity. In some cases the direct effect of these values on Conservative voting was negative. This was one example, in a number of findings, which demonstrated the role of political values in underpinning the nature of left-right identity and how this in turn is relevant to the dynamics of party competition. It contributes further to demonstrating the utility that values have in explaining the pathways that underpin vote choice. It is not claimed that values are strong direct predictors of vote choice. However, this study presents findings that support the contention that values have an important role in explaining the socio-psychological constraints that underlay the determinants of political competition (Verplanken and Holland, 2002).

3. Measure the influence of political context on the values-voting relationship

The most significant contribution that the study aimed to make to the literature was to systematically analyse the role of party system context on the values-voting relationship. The context of values has always been implicit in the literature on core political values. There is an underlying assumption that supply side political competition has an impact on the significance of values on voting across a range of single country analysis (Marietta and Barker, 2007; SurrIDGE, 2012). However, this influence is rarely explicitly stated or specifically tested empirically. Knutsen and Kumlin (2005) is a stand out exception that is framed as an exploratory analysis in this area. It is generally assumed that political values are contextually dependent constructs: both in terms of their formation and their relevance to political behaviour. This contrasts with the Schwartz values literature, which is explicit in stating a universal approach to values (Schwartz, 1992). The overall role of context in defining the values-voting relationship is less clear in the Schwartz literature. There is an acknowledgement of the role of priming: different political contexts are liable to prime different underlying values (Caprara *et al.*, 2006). However, investigations into the role of priming have focused on the personalities, actions and policies of political elites rather than the structure and nature of political competition (Caprara *et al.*, 2007; Vecchione *et al.*, 2013). A similar approach has been taken by Goren (2005) in the core political values literature. These studies are important because they demonstrate the susceptibility of voters' values to influence from external forces. The relationship between values and voting is shown not to be automatic: specific values can become more or less relevant depending on how they are primed by various political factors. Goren, Federico and Kittilson (2009) have even demonstrated the capacity for political actors to move the values of their core voters. This provides evidence of a dynamic relationship between the values of voters and political parties. However, these studies

have not gone as far as measuring the supply side context as reflected in the party system. This study has therefore been able to contribute to the literature by providing an empirical test of the influence of political context on the values-voting relationship.

The core findings of the final empirical chapter supports a theory that it is the content of political competition that matters to the values-voting relationship not the structure, which is in line with recent findings on the impact of political context on political attitudes and behaviour (Dalton, 2008). This connects with both the existing literature on priming and a wider normative literature on the role that elections have as tools for citizens to decide between competing values based upon visions of society (Easton, 1953). In showing that it is the content of politics that matters for values, the study reinforces the idea that values are a dynamic construct that require some form of priming to become relevant to vote choice decision making. Where there is greater ideological divergence between parties there is a stronger relationship between values and voting. The study could not directly establish the direction of causality but it did demonstrate that this was a function of a stronger direct relationship between values and voting. This provides two important insights. Firstly, it suggests the findings are valid and not just a function of a stronger association with left-right in more polarised party systems. When a party system is more polarised values do matter more to vote choice. Secondly, that the relationship between values and voting is a dynamic one and not simply an artefact of the structure of political competition in any given context. For example, it is not sufficient for an electoral system to contain a Centre Left party for Egalitarianism to be an important political value; Egalitarianism becomes a relevant political value only if the political parties as a whole make it relevant through the discourses of party competition. In this instance voters may or may not hold Egalitarian values but it will only become relevant to their vote choice if parties prime this value³⁰; which gives agency to both voters and parties in regards to values based electoral appeals. It demonstrates that parties are not passive actors in this process: their positioning has more importance than some of the previous literature on values has suggested (Leimgruber, 2011). This connects to a wider normative debate around the extent to which democracy is healthier as a whole if the party system represents a wide variety of competing visions (Tetlock, 1986; Westen, 2007). It situates this study firmly within the political choice literature in electoral studies and broader supply side approaches to political studies (Evans and De Graaf, 2013; Richards and Smith, 2015). Even when taking political identity into consideration there is no automatic association between values and voting: it is dependent on the content of supply side political competition.

³⁰As highlighted most clearly in the German findings in Appendix 11, where the emergence of *Die Linke* appears to have played a role in breaking the connection between egalitarianism and voting for the *SPD*.

Values and Context Revisited

The primary contribution this study has been able to make is to demonstrate that there is a relationship between political values, voting and political context. While it is important to state that the analysis was not able to demonstrate causality, it is still relevant that the core findings suggest that it is the content of politics that is most relevant for values, not the structure. This is consistent with previous work on political context suggesting that it is the polarisation of a political system that produces a stronger association between underlying political divisions and vote choice, particularly in regard to left-right dimensions (Dalton, 2008; Dalton, Farrell and McAllister, 2011). Dalton and Anderson (2010) apply a multi-level modelling approach to analysing the influence of macro-level context on a range of political behaviours. They argue that political context is relevant because it indirectly shapes the values and beliefs of individuals in regards to what is politically desirable and politically plausible. This series of studies provided convincing evidence that the nature of political competition at the national level is a stronger predictor of variance than the institutional structures in which those choices take place across a wide range of political attitudes and behaviours. They recommend that 'rather than tinkering only with the formal rules, institutional designers of the electoral process should consider how to strengthen democratic representation and accountability through the diversity of the choices they produce' (Dalton and Anderson, 2010, p.28). The implication being that in order to improve quality and satisfaction with electoral competition more focus should be given to the political content of electoral choice, rather than just the institutional structure from which those choices emerge. In demonstrating that polarisation is a key feature of strengthening the direct relationship between values and voting, both through and beyond the function of left-right identity, this study has been able to demonstrate further evidence of this perspective. This raises interesting normative implications regarding the desirability of a strong values-voting relationship for electoral competition. Applying the Dalton and Anderson perspective, it is desirable in terms of representation and satisfaction for political systems to reflect the range of values preferences in the electorate. This connects with the central idea of values representing 'competing conceptions of the good' (Tetlock, 1986, p.820), making it desirable for this to be reflected in democratic electoral systems. Alternatively, with the fragmentation of the party system and the emergence of new political parties representing wider and, arguably, more extreme values based appeals, the possibility exists of an increased role for political values contributing a destabilising influence on party systems.

This is linked to the discussion on the two potential explanations for the role of context in shaping the values-voting relationship. Firstly, that in countries in which the electorate are more strongly divided on core political values the party system will be

more polarised. In other words, this is a demand-side explanation in which the party system evolves to reflect a polarised electorate. This is consistent with cleavage theories of party system evolution. In this perspective a range of values are reflective of the classic social cleavages that underpin political competition (Lipset and Rokkan, 1967). It has been generally shown that left-right is a political heuristic that is capable of absorbing a wide range of divisions in West European democracies (Van Deth and Scarbrough, 1995b; Knutsen, 1995c; Schmitt and Van der Eijk, 2010). Therefore, it is not surprising to confirm findings suggesting that multiple political values can underpin the nature of left-right political division (Pioro, Schwartz and Davidov, 2011; Aspelund, Lindeman and Verkasalo, 2013). The original theoretical expectation was that values would underpin left-right and that this indirect relationship with voting would be related to contextual factors. Yet, the analysis confounded aspects of this expectation. The SEM structure made it possible to differentiate between direct effects and indirect effects via left-right. Thus it was possible to highlight that it was the direct relationship between values and voting that was largely driving this variation, not the indirect effect.

This provides evidence to support the idea that contextual influence is related more clearly to a supply side explanation than the demand side which is linked to the second causal explanation. Voters are not driving parties to respond to higher or lower degrees of left-right polarisation among the electorate; voters instead make clearer direct values links with parties that are expressing more explicitly distinctive political positions. The explanation is that polarisation is a function of party positioning rather than party responsiveness. In other words, if parties identify themselves with issues and programmes that imply a specific value orientation then they prime those values within the electorate. For example, there may be a group of voters who strongly identify with Traditionalist values but this is only likely to become particularly relevant to individual vote choice decisions if parties take positions that are relevant to this value. This implies there is nothing automatic about a particular party family representing a particular political value irrespective of political context. On a broader basis though, it is clear that what makes political values potentially interesting and relevant as determinants of vote preferences is their variability by context rather than their universal nature (Davidov *et al.*, 2008). The study has been able to reinforce the societal nature of political values by providing evidence that political values are primed by unique aspects of electoral competition, which reinforces Rokeach's original defence of values based approaches to political analysis (Rokeach, 1973; Hitlin and Piliavin, 2004). The overall argument that is being made here is that political context matters to the values-voting relationship because party positioning matters. This very much aligns the study with the political choice literature on voting behaviour (Budge, Robertson and Hearl, 1987; Bartolini and Mair, 1990; Wessels and Schmitt, 2008; Evans and De Graaf, 2013).

Within this framework it is important to consider how the mediating influence of left-right identity may be impacted by the evolution of the political context and multi-party competition. As new issues emerge they map on to the left-right divide over-time and become embedded in the common political discourse. There are substantial insights on the evolution of the meaning of left-right over time in response to changing citizen attitudes and party system transformation. This was originally connected with the Inglehart literature on the disruptive influence of new politics on classic values divides based on distributional politics (Inglehart and Klingemann, 1976; Inglehart, 1979; Abramson and Inglehart, 1987; Kitschelt and Hellemans, 1990). Inglehart has demonstrated that as a core segment of the electorate became increasingly motivated by postmaterialist values, these values became attached to a left of centre position (Inglehart, 1979). So in contrast to original predictions that postmaterialist values may complement or replace left-right division (Inglehart, 1971), Inglehart (1990) subsequently demonstrated the capacity of the left-right dimension to absorb this 'new politics'. Knutsen (1995c) also demonstrated the extent to which postmaterialist positions had become an increasingly important aspect of what it meant to be on 'the left' of politics in West European Democracies. Originally, this perspective was linked to explanations for the emergence of new parties of the left, such as the Greens (Kitschelt and Hellemans, 1990). However, increasingly it could equally be considered as part of an explanation for a delayed materialist backlash with the emergence of new challenger parties of the right that often set themselves up in opposition to these concerns, particularly as regards questions of cultural identity and immigration (Kriesi *et al.*, 2008; Bowyer and Vail, 2011; Ford and Goodwin, 2014). Therefore, one key explanation for the range of roles that left-right is shown to exhibit as a mediator of the values-voting relationship is the complexity in the evolution of multi-party political competition. Multi-party competition potentially both accentuates and dampens the influence of left-right in the models depending on the competitive electoral context. This may account for the somewhat counterintuitive findings that suggest some evidence of a positive direct effect between Authoritarianism and voting for Centre Left parties. In some analyses (but certainly not all) this direct effect was confounded by a negative indirect effect. For other party families of the left the relationship between Authoritarianism and vote choice was consistently negative, which would conform to expectations. One potential explanation for this is that levels of Authoritarianism have been shown to be influenced by age and cohort effects (Jost *et al.*, 2003; Tilley, 2005). There may be a group of older voters for centre left parties who have Authoritarian values. Before the emergence of 'new politics' and postmaterialist concerns there was likely to be no automatic contradiction between having Authoritarian values and voting for Centre Left parties but, equally, it is unlikely this would have mapped on to left-right division either. As party systems evolve, and the electorate becomes more fragmented, a wider range of values become

relevant but their relationship with the left-right identity becomes less clear-cut and universal across political contexts.

Within the choice framework of this study Kitschelt and Hellemans (1990) provide a crucial explanation of the impact of multi-party competition on left-right from a supply side perspective. They show evidence of the mechanism that may explain the dynamic nature of the values-voting relationship and why left-right exhibited a complex role as a mediator of this relationship in the core analysis. This demonstrates the way in which the emergent elites of the Belgian Green parties (defined as highly engaged activists) identified themselves as being on the left and framed the discourse of their parties accordingly. In this way the meaning of left-right, as regards its significance to party choice, is signalled by party elite positioning with new issue dimensions (often reflective of additional postmaterialist values) becoming embedded within the left-right discourse. The argument is that the highly politically engaged, particularly those associated with new political parties, are likely to be strongly ideological and frame their party identity in their own image, thereby incorporating additional value dimensions into left-right party system competition. In addition, Kitschelt and Hellemans (1990, p.211) acknowledge the likelihood that 'Traditional as well as new meanings of left and right co-exist and there is no reason to believe that one will displace the other'. This creates cross-cutting complexity in the meaning of left-right in multi-party systems. Therefore, the possibility exists for left-right to have varying values associations and functions across different segments of the electorate. This provides a potential explanation for the left-right mediator exhibiting a range of functions on the values-voting relationship for different parties and in different contexts. These relationships are dynamic and subject to change based on the evolution of the party system and the issue agenda. It demonstrates why left-right did not prove a complete mediator of the values-voting relationship that was originally expected. Hellwig (2008) has demonstrated that the overall influence of left-right has declined – one explanation proffered for this is the emergence of new politics issues cross-cutting traditional economic materialist meanings of left-right. The role of direct effects in the models would provide some support for this but the influence of left-right ultimately highlighted additional contextual complexity in the values-voting relationship. While its influence on the relationship was weaker than theorised, it had a substantively interesting role as both a mediator and a confounder of certain key values-voting relationships.

It is also important to consider what aspect of political values that the parties are ultimately priming in these contexts. Recent work in political psychology would suggest that party appeals can prime different aspects of voters underlying emotions (Westen, 2007; Haidt, 2012). This would fit with a social psychology explanation that would start from the premise that values are an expression of the human needs and

personality traits of voters (Schwartz, 1992), with the crucial distinction that the Schwartz literature recognises the importance of the context in which those choices are made. The psychological approaches have convincingly demonstrated the extent to which voters have rationalising emotional responses that potentially impair their ability to make truly rational political choices (Lakoff, 2009; Haidt, 2012). However, it could be contended that these approaches can treat the voter as de-contextualised and potentially lacking in agency. In many ways, Haidt's (2012) approach presents a relatively bleak view of the electorate as being essentially emotional targets for subconscious manipulation by political parties. This is because these values based emotions are not clearly linked to any form of socio-political identity or to the political context in which vote choice is made. This is why the political choice perspective is relevant to an understanding of the values-voting relationship. Voters do not lack agency in this regard. Many key studies have shown that voters do respond differently based on the choices presented and there is additional evidence of value based constraint on decision-making (Bartolini and Mair, 1990; Goren, 2005; Dalton and Anderson, 2010). Many studies of class de-alignment share this perspective in showing that if parties move away from taking positions that reflect the preferences of their core class voters these voters will break their connection with that party (Weakliem, 1989; Evans, 1999; Van der Waal, Achterberg and Houtman, 2007; Evans and De Graf, 2013). The argument this study makes is that political values represent a possible example of the underlying expression of this interaction between the political identities of voters and the supply-side positioning of parties. This is in line with the original positioning of values in the socio-psychological funnel of causality from the classic Michigan model (Campbell *et al.*, 1960). Political values are the expressions of wider socio-political identities, such as class and religion. Parties are unlikely to prime those identities through direct appeals to specific religious or class groups within society, so they partially do so by priming specific values through the political positions they occupy. This is why it is the content of electoral competition that matters for values rather than just the structure. It is also what gives values their dynamic quality in highlighting the interactions between supply and demand-side factors. It is primarily through highlighting this micro-macro link that values can contribute to further understanding of political behaviour (Hitlin and Piliavin, 2004).

This brings the study back to the issue of normative assumptions. The argument being made is that values hold a central role in electoral studies research because they are dynamic and represent a way of exploring the interaction between supply and demand factors. Political values are rendered relevant by the electoral context and are an expression of voter's wider sense of their socio-political identities. However, the normative assumption of this position is less clear. There are several perspectives on this which can be drawn from the literature. Firstly, there is a classical approach represented by Easton (1953), and reinforced by other theorists of democracy, that

elections represent a way of peacefully resolving disputes regarding alternative visions of society (Beetham, 1999). While these divisions typically reflect conflict between large societal interest groups over the material distribution of private goods, they often manifest themselves in clashes of 'competing conceptions of the good' (Tetlock, 1986, p.820). This way democratic competition maintains its role as the collective arbiter of competing values and parties their role as the representatives of those visions. There is a danger that if key values are not given a voice in the political process then people will cease to take part, become disillusioned, apathetic or hostile towards the political system and perhaps attempt to act outside the existing system (Beetham, 1999). This argument connects with aspects of the political choice literature that highlights a degree of detachment of political parties from their traditional base in order to pursue catch-all strategies (Kriesi *et al.*, 2008). It largely positions de-alignment as a function of Centre Left parties moving away from basing their appeal purely on their working class base. In addition, it has been demonstrated that there is a strong values based element to the rise of challenger parties across Western Europe (Kriesi *et al.*, 2008; Ford and Goodwin, 2014). This suggests that if parties create a vacuum by moving away from values positions with which voters could identify, other parties will emerge. These values are almost certainly those based on the socio-political identities that traditional parties perceive to be weakening. Therefore applying a political choice perspective to the role of values provides a more positive view of individual voter's abilities to meaningfully convert their underlying values into their vote preferences. It holds that voters are responsive rather than passive and that they are capable of organising their political positions coherently with respect to their electoral preferences (Converse, 1964). It is simply that they do not necessarily organise their preferences according to a narrow political ideology but according to a wider range of political value dimensions (Feldman and Johnson, 2014). Ultimately, this understanding reinforces the idea that parties must be responsive to the values of their core voters or they risk losing them to challenger parties. But, catch-all parties may increasingly struggle to achieve this if new issues render a wider range of political values relevant to electoral competition and map onto the left-right divide in complex ways. Therefore, context plays a key role in understanding both the depth and breadth of the impact of political values on vote choice.

Limitations

The study has a number of methodological limitations that may restrict the validity of the findings from both an internal and external perspective. The key limitations were related to the data that was contained in the European Values Survey. The main issue being that the EVS is not specifically designed to capture political behaviour. This means that its range of survey questions related to voting behaviour is limited. The vote choice question itself is limited in scope and generated a much larger number of

non-voters than would be ideal. It is also relevant that the EVS is not an election survey; respondents are therefore being asked to express their voting preference in the next parliamentary election which varies in its proximity to the survey data from country to country. Prospective vote choice measures are known to contain larger errors in reporting than retrospective questions (van der Brug, van der Eijk and Franklin, 2007). It also represents a snapshot of public opinion and there is no way of delineating in the EVS between strong partisans and weak supporters. Nevertheless, the analysis in this study is not aiming to build accurate predictive models of election outcomes - it is testing the relationship between values and vote choice preferences. Therefore, while limited in scope as a measure of vote choice, it is a reasonable measure of the association between values and party support.

A more significant limitation in the EVS data is related to the range of values that can be operationalised. *Chapter 2* identified three broad political value types from the literature: conservative moral values, individual values and collective values. The EVS was effective for operationalising the first two but limited regarding collective values. The challenges that prevented the inclusion of a Security value have been discussed in *Chapter 3*. It was also necessary to compromise the robustness of the measure on egalitarianism because there were not the necessary indicators in the EVS to develop a multi-item measure (Ansolabehere, Rodden and Snyder, 2008). This compromise was made because it was felt that this is a critical political value in Western European democracies that any credible set of political values measures must include. In broad terms the analysis supports the argument that a wider range of values predict right voting and that the relationship between values and voting is stronger for right parties than left parties. However, it is not able to make this a more central finding to the thesis because it has to be acknowledged that this could be a function of the type of values that were operationalised.

The issue of Measurement Invariance has been dealt with extensively in the thesis. The overall concern is that while the measurement model in *Chapter 3* provided evidence that these values existed as constructs across all the countries in the analysis, it cannot be claimed that they have equal meaning. This may call into question the nature of the comparability of the findings from the values measures across countries; this is one reason why the analysis did not pursue a multi-level strategy. However, the general models at the individual country level were good and the pooled analysis was also robust. Recent debates on measurement invariance suggest that variance within an independent variable in a cross-national study need not be problematic; this is dependent on the substantive judgement of the researcher and whether it proves a viable explanatory predictor (Welzel and Inglehart, 2016). Welzel and Inglehart suggest there is a greater danger in researchers underestimating substantively relevant variance by forcing equivalence. The variation between

countries in the interpretation of values dimensions is relatively subtle. It is also indicative of the likely reality: that the meaning of political values varies across countries. In addition, the findings conformed to most theoretical expectations: in general values predicted vote choice and left-right identity in the direction that would be expected. The study therefore made a virtue of this variation as representing a more realistic conception of political values. They are contextually dependent constructs but the measures used in this study are sufficiently broad to be confident that they exist across the 15 countries included in the analysis.

There is no doubt that the contextual analysis in the final empirical chapter would have been improved had a multi-level modelling approach been applied. This would have allowed the study to directly assess the impact of contextual level effects on the individual level values-voting relationship. Instead the 2 step hierarchical regression approach captured these effects in a more indirect and aggregated manner. In addition, applying a multi-level approach would have been a more intuitive way in which to capture the influence of political context and would have been consistent with recent practice in this area (Dalton and Anderson, 2010). It also would have enabled clearer presentation and interpretation of the research findings. In short, multi-level modelling would have been a more powerful and systematic method to apply to the final stage of the analysis. The original aim had been to use a multi-level hierarchical modelling approach for this stage of the analysis by introducing the contextual effects as second level indicators and therefore obtaining an overall measure of the effect in both fixed effects and random effects models. However, combining this with the structural equation approach was considered to put too much pressure on the existing measurement model. Multi-level modelling is a computationally dense approach to analysis, and when combined with the latent measurement model the structural model lost stability. A multi-level approach was not going to be viable within this latent structural framework and it was decided that it was more critical to retain the structural path model than to apply a multi-level approach, since applying the latent measurement model cross-nationally was a core contribution the study was aiming to make. It was also clear that an absolute maximum of 30 data points (and considerably less in many cases) would not be sufficient to produce robust findings using this multilevel approach, especially considering the cross-national variation that was present within the CFA measurement model itself and the level of missing data. The 2-stage meta-analysis approach undertaken here was considered more reliable and is consistent with some prior research on the influence of contextual effects on vote choice; particularly when looking at the Left-Right scale (Dalton, Farrell and McAllister, 2011). In addition, while clearly not the ideal methodological approach, it does allow meaningful comparisons with Knutsen and Kumlin (2005), which is the only empirical study to have looked at contextual effects on the values-voting relationship in a cross-national context. The study applied a similar methodological approach in

the absence of a viable multi-level model. Therefore while non-viability of the multi-level approach here was undoubtedly frustrating and limited the causal inferences the study could make, the alternative method used is still consistent with precedent in the literature and sufficient to highlight key findings regarding the influence of context on the values-voting relationship.

Endogeneity is another potential issue for this study, especially as the cross-sectional data does not allow for the use of longitudinal techniques to test the extent of endogeneity (Sanders *et al.*, 2008; Pickup and Evans, 2013). Given the central role of Individualism and Egalitarianism as core political values it can be argued that the structural model uses the values that underpin left-right division to predict left-right identity and then to predict left or right voting. Adding the polarisation contextual indicator could also be said to be highlighting the influence of left-right identity in more polarised countries, but not the influence of values. The theoretical defence of this approach is laid out in *Chapters 4 and 5*. However, *Chapters 5 and 6* also advance an empirical defence. In the structural model it is possible to disentangle the effects of values from those of Left-Right. This confounded the original assumptions of the study: the direct influence of political values on voting was stronger and more relevant than the indirect effect. *Chapter 5* showed that it was the direct effect that was susceptible to the influence of political context not the indirect effect. It is also important to point out that effects are not just exhibited for Individualism and Egalitarianism. While these are clearly core values, important findings regarding the structure of the values-voting relationship were also attached to Traditionalism, Conformity and Authoritarianism. With these three values the relationship between political identity and party choice is less clear-cut. The findings therefore do highlight the political values measures as making a unique contribution and not merely serving as proxies for a binary conception of political ideology. Endogeneity is also dealt with to some degree in the conceptualisation of the model. Left-Right identity is not being conceptualised here as an ideological construct, it is defined as a political heuristic and the way in which it is captured in the EVS supports this.

Concluding Statement

This thesis has argued that the influence of political values on voting is determined by the supply side political context in which those decisions take place. This is not an original claim. Debate around the extent to which values are contextually dependent constructs that require priming have been a consistent feature of the research literature on political values and voting. However, this study has been able to contribute to this literature by providing an empirical test of this relationship in a cross-national comparative analysis. It was therefore able to explore both supply and demand side aspects of the mechanisms through which voters convert their political

values into their vote choice preferences. In doing so the analysis has highlighted aspects of the complex and dynamic relationship between values and voting and demonstrated that while political values appear relatively stable constructs, their relationship with vote preferences is dependent on how voters utilise their values to make their vote choice decision. This mechanism appears subject to variation by party and by national level political context. In short, the study has been able to demonstrate that context matters to the relationship between political values and voting. The party system context frames the nature and intensity of political competition. By staking out clear, strong and identifiable political positions parties allow voters to more easily convert their political values preferences into meaningful electoral choices. The connection between political values and vote choice is therefore not an automatic one. It is at least partially contingent on the extent to which voters perceive certain key political values as relevant to their sense of left-right identity and how effective parties are at priming these values within the context of electoral competition. The cross-national approach to studying this relationship has been able to highlight these effects and draw out some interesting variations and substantive implications regarding the role of political values on voting for specific party families in Western Europe.

Further research in this area needs to focus on the potential for political values to explain variation in voter behaviour between different political contexts. It should specifically focus on variations in the pathways through which values influence voting, as that is where the complexity in the relationship is ultimately exhibited and more understanding is required. Research should also focus on the influence of different pathways for various subgroups within a country – for example, whether the values-voting mechanism operates differently across age groups or at different levels of political sophistication.

Values reflect social identities and can be rendered relevant to vote choice decisions through aspects of an individual's sense of their political identity and this identity itself is clearly not limited to left-right positioning. In addition, the role of party system context in priming this mechanism and making values relevant to vote choice is substantively important and can explain cross-national variation in the relationship between political values and voting. It is this interactive and dynamic quality in values that allows researchers to investigate relevant aspects of the importance of the micro-macro link in defining political behaviour that this study has been primarily interested in. The findings here suggest that this is a potentially fruitful and substantively interesting approach to exploring the values-voting relationship in a comparative cross-national context.

Bibliography

- Abramson, P. R. and Inglehart, R. (1987). 'Generational replacement and the future of post-materialist values', *The Journal of Politics*, 49(01), pp. 231-241.
- Abramson, P. R. and Inglehart, R. (1995). *Value Change in Global Perspective*. Ann Arbor: University of Michigan Press.
- Achen, C. H. (2005). 'Two-step hierarchical estimation: beyond regression analysis', *Political Analysis*, 13(4), pp. 447-456.
- Agnew, J. A. (1987). *Place and Politics: The Geographical Mediation of State and Society*. Boston: Allen and Unwin.
- Agnew, J. A. (2002). *Place and Politics in Modern Italy*. Chicago: University of Chicago Press.
- Allum, N., Read, S. and Sturgis P. (2011). 'Evaluation Change in Social and Political Trust in Europe', in Davidov, E., Schmidt, P. and Billiet, J. (eds.) *Cross-Cultural Analysis: Methods and Applications*. New York: Routledge, pp. 35-54.
- Altemeyer, B. (1998) 'The other "authoritarian personality"', *Advances in Experimental Social Psychology*, 30, pp. 47-91.
- Alvarez, R. M. and Brehm, J. (1995). 'American ambivalence towards abortion policy: a heteroskedastic probit method for assessing conflicting values', *American Journal of Political Science*, 39(4), pp. 1055-82.
- Alvarez, R. M, and Brehm, J. (1997). 'Are Americans ambivalent towards racial policies?', *American Journal of Political Science*, 41(2), pp. 345-74.
- Alvarez, R. M. and Brehm, J. (2002). *Hard Choices, Easy Answers: Values, Information and American Public Opinion*. Princeton: Princeton University Press.
- Andersen, R. and Heath, A. (2003). 'Social identities and political cleavages: The role of political context', *Journal of the Royal Statistical Society Series a-Statistics in Society*, 166, pp.301-327.
- Ansolabehere, S., Rodden, J. and Snyder, J. M. (2008). 'The strength of issues: Using multiple measures to gauge preference stability, ideological constraint, and issue voting', *American Political Science Review*, 102(2), pp. 215-232.
- Aspelund A., Lindeman, M. and Verkasalo, M. (2013). 'Political Conservatism and Left-Right Orientation in 28 Eastern and Western European Countries', *Political Psychology*, 34(3), pp. 409 – 417.
- Barker, D.C. and Carman, C.J. (2000). 'The spirit of capitalism? Religious doctrine, values, and economic attitude constructs', *Political Behaviour*, 22(1), pp. 1-27.
- Barnea, M. (2003). *Personal values and party orientations in different cultures*. PhD. The Hebrew University of Jerusalem.
- Barnea, M. F. and Schwartz, S. H. (1998). 'Values and voting', *Political Psychology*, 19(1), pp. 17-40.
- Baron, R.M. and Kenny, D.A. (1986). 'The moderator-mediator variable distinction in social psychology research: Conceptual, strategic and statistical considerations', *Journal of Personality and Social Psychology*, 51(6), pp. 1173-1182.

- Bartels, L. (2013). Party systems and political change in Europe, *Annual Meeting of the American Political Science Association*, Vanderbilt University, Chicago. 29th August – 1st September 2013.
- Bartolini, S. and Mair, P. (1990). *Identity, Competition, and Electoral Availability: The Stability of European Electorates, 1885-1985*. Cambridge: Cambridge University Press.
- Bauman, Z. (2000). *Liquid Modernity*. Cambridge: Polity Press.
- Beetham, D. (1999). *Democracy and Human Rights*. Cambridge: Polity Press
- Benoit, K. and Laver, M. (2006). *Party Policy in Modern Democracies*. Abingdon: Routledge.
- Blais, A. and Rubenson, D. (2013). 'The source of turnout decline: New values or new contexts?', *Comparative Political Studies*, 46(1), pp. 95-117.
- Bohner, G. and Waenke, M. (2002). *Attitudes and Attitude Change*. Hove: Psychology Press.
- Bowyer, B.T. and Vail, M.I. (2011). 'Economic insecurity, the social market economy, and support for the German left', *West European Politics*, 34(4), pp. 683–705.
- Braithwaite, V. (1982). 'The structure of social values: Validation of Rokeach's two-value model', *British Journal of Social Psychology*, 21(3), pp. 203-211.
- Braithwaite, V. (1994). 'Beyond Rokeach's Equality-Freedom Model: Two-Dimensional Values in a One-Dimensional World', *Journal of Social Issues*, 50(4), pp. 67-94.
- Braithwaite, V. (1998). 'Consensus, stability and meaning in abstract social values', *Australian Journal of Political Science*, 33(3), pp. 363-380.
- Braithwaite, V., Makkai, T. and Pittelkow, Y. (1996). 'Inglehart's Materialism-Postmaterialism Concept: Clarifying the Dimensionality Debate Through Rokeach's Model of Social Values', *Journal of Applied Social Psychology*, 26(17), pp. 1536-1555.
- Brooks, C., Nieuwbeerta, P. and Manza, J. (2006). 'Cleavage-based voting behaviour in cross-national perspective: Evidence from six post-war democracies', *Social Science Research* 35(1), pp. 88–128.
- Brown, T.A. (2006). *Confirmatory Factor Analysis for Applied Research*. 2nd edn. New York: The Guildford Press.
- Budge, I., Robertson, D. and Hearl, D. (eds.) (1987). *Ideology, strategy and party change: spatial analyses of post-war election programmes in 19 democracies*. Cambridge: Cambridge University Press.
- Campbell, A. A., Converse, P. E., Miller, W. E. and Stokes, D. E. (1960). *The American Voter*. New York: John Wiley and Sons.
- Caprara, G.V., Schwartz, S., Capanna, C., Vecchione, M. and Barbaranelli, C. (2006). 'Personality and politics: Values, traits, and political choice', *Political Psychology*, 27(1), pp. 1-28.
- Caprara, G.V, Vecchione, M., Barbaranelli, C. and Fraley, R.C. (2007). 'When likeness goes with liking: The case of political preference', *Political Psychology*, 28(5), pp. 609-632.
- Caprara, G.V. and Zimbardo, P.G. (2004). 'Personalizing politics: A congruency model of political preference', *American Psychologist*, 59(7), pp. 581-594.

- Castles, F. G. and Mair, P. (1984). 'Left-right political scales: Some 'expert' judgments'. *European Journal of Political Research*, 12(1), pp. 73-88.
- Charnock, D. and Ellis, P. (2004). 'Postmaterialism and postmodernization in Australian electoral politics', *Electoral Studies*, 23(1), pp. 45-72.
- Chinni, D. and Gimpel, J. (2010). *Our Patchwork Nation: The Surprising Truth about the "Real" America*. New York, NY: Gotham Books.
- Cieciuch, J., Davidov, E., Vecchione, M., Beierlein, C. and Schwartz, S. H. (2014). 'The cross-national invariance properties of a new scale to measure 19 basic human values: A test across eight countries', *Journal of Cross-Cultural Psychology*, 45 (2), pp. 764-776.
- Clarke, H. D., Sanders, D., Stewart, M. C. and Whiteley, P. (2004). *Political choice in Britain*. Oxford: Oxford University Press.
- Clarke, H. D., Sanders, D., Stewart, M. C., and Whiteley, P. (2009). *Performance Politics and the British Voter*. Cambridge: Cambridge University Press.
- Cochrane, R., Billig, M. and Hogg M. (1979). 'Politics and values in Britain: A test of Rokeach's two-value model', *British Journal of Social and Clinical Psychology*, 18(2), pp. 159-167.
- Conover, P.J. and Feldman, S. (1981). 'Origins and meaning of liberal/conservative self-identifications', *American Journal of Political Science*, 25(4), pp. 617-645.
- Converse, P.E. (1964). The nature of belief systems in mass publics, in Apter, D. E. (ed.) *Ideology and Discontent*. New York: Free Press, pp. 206-261.
- Craig, S.C., Martinez, M.D. and Kane, J.G. (2005). 'Core values, value conflict and citizens' ambivalence about gay rights', *Political Research Quarterly*, 58(1), pp. 5-17.
- Dahl, R. A. (2000). *On Democracy*. New Haven, CT: Yale University Press.
- Dalton, R. J. (2006). *Citizen Politics: Public Opinion and Political Parties in Advanced Industrial Democracies*. 4th edn. Washington DC: CQ Press.
- Dalton, R. J. (2008). The quantity and the quality of party systems party system polarization, its measurement, and its consequences. *Comparative Political Studies*, 41(7), pp. 899-920.
- Dalton, R. J. and Anderson, C. (2010). *Citizens, Context, and Choice: How Context Shapes Citizens' Electoral Choices*. Oxford: Oxford University Press.
- Dalton, R. J., Farrell, D. M. and McAllister, I. (2011). *Political Parties and Democratic Linkage: How Parties Organize Democracy*. Oxford: Oxford University Press.
- Dalton, R.J. and Wattenberg, M.P. (2002). *Parties without Partisans: Political Changes in Advanced Industrial Democracies*. Oxford: Oxford University Press.
- Datler, G., Jagodzinski, W. and Schmidt, P. (2013). 'Two theories on the test bench: Internal and external validity of the theories of Ronald Inglehart and Shalom Schwartz', *Social Science Research*, 42(3), pp. 906-925.

- Davidov, E., Datler, G., Schmidt, P. and Schwartz, S, (2011). Testing the invariance of values in the Benelux countries with the European Social Survey: Accounting for ordinality', in Davidov, E., Schmidt, P. and Billiet, J. (eds.). *Cross-Cultural Analysis: Methods and Applications*. New York: Routledge, pp. 149-172.
- Davidov, E., Meuleman, B., Billiet, J. and Schmidt, P. (2008). 'Values and support for immigration: A cross-country comparison', *European Sociological Review*, 24(5), pp. 583-599.
- Davidov E., Schmidt, P. and Billiet, J. (eds.) (2011). *Cross-Cultural Analysis: Methods and Applications*. New York: Routledge.
- Davis, D. W., and Davenport, C. (1999). 'Assessing the validity of the postmaterialism index', *The American Political Science Review*, 93(3), pp. 649-664.
- De Graaf, N.D., Jansen, G. and Need, A. (2013). The political evolution of class and religion – An Interpretation for the Netherlands, 1971-2006', in Evans, G. and De Graaf, N. D. (eds.) *Political Choice Matters: Explaining the Strength of Class and Religious Cleavages in Cross-national Perspective*. Oxford: Oxford University Press, pp.205-242
- De Koster, W. and van der Waal, J. (2007). 'Cultural value orientations and Christian religiosity: On moral traditionalism, authoritarianism, and their implications for voting behavior', *International Political Science Review*, 28(4), pp. 451-467.
- de Vries, C. E., Hakhverdian, A. and Lancee, B. (2013). 'The dynamics of voters' left/right identification: the role of economic and cultural attitudes', *Political Science Research and Methods*, 1(02), pp.223-238.
- Dirilen-Gümüş, Ö. and Sümer, N. (2013). 'A comparison of human values among students from postcommunist Turkic republics and Turkey', *Cross-Cultural Research*, 47(4), pp. 372-387.
- Dogan, M. (1998). 'The decline of traditional values in Western Europe - Religion, nationalism authority', *International Journal of Comparative Sociology*, 39(1), pp. 77-90.
- Döring, H. and Manow, P. (2012). Parliament and government composition database (ParlGov): An infrastructure for empirical information on parties, elections and governments in modern democracies. Version 12/10 – 15 October 2012.
- Downs, A. (1957). *An Economic Theory of Democracy*. New York: Harper and Row.
- Druckman, J. N., Peterson, E. and Slothuus, R. (2013). 'How elite partisan polarization affects public opinion formation', *American Political Science Review*, 107(01), pp. 57-79.
- Dunn, K.P. and Singh, S.P. (2011). 'The surprising non-impact of radical right-wing populist party representation on public tolerance of minorities', *Journal of Elections, Public Opinion and Parties*, 21(3), pp. 313-331.
- Easton, D. (1953). *The Political System*. New York: Knopf.
- Evans, G. (ed.) (1999). *The End of Class Politics? Class Voting in Comparative Context*. Oxford: Oxford University Press.
- Evans, G. and De Graaf, N. D. (2013). *Political Choice Matters: Explaining the Strength of Class and Religious Cleavages in Cross-national perspective*. Oxford: Oxford University Press.

- Evans, G. A. and Heath, A. F. (1995). 'The measurement of left-right and libertarian-authoritarian values: a comparison of balanced and unbalanced scales', *Quality and Quantity*, 29(2), pp. 191-206.
- Evans, G., Heath, A. and Lalljee, M. (1996). 'Measuring left-right and libertarian-authoritarian values in the British electorate', *British Journal of Sociology*, 47(1), pp. 93-112.
- Evans, G. and Whitefield, S. (1995). 'Social and ideological cleavage formation in post-communist Hungary', *Europe-Asia Studies*, 47(7), pp. 1177-1204.
- EVS (2011). *European Values Study 1981-2008*, Longitudinal Data File. GESIS Data Archive, Cologne, Germany, ZA4804 Data File Version 2.0.0 (2011-12-30) DOI:10.4232/1.11005.
- Feldman, S. (1988). 'Structure and consistency in public opinion: The role of core beliefs and values', *American Journal of Political Science*, 32(2), pp. 416-440.
- Feldman, S. (2003). Values, ideology and the structure of political attitudes, in Sears, D. O., Huddy, L. and Jervis, R. (eds.) *Oxford Handbook of Political Psychology*. Oxford: Oxford University Press, pp. 477-508.
- Feldman, S. and Johnston, C. (2014). 'Understanding the determinants of political ideology: Implications of structural complexity', *Political Psychology*, (35)3, pp. 337-358.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
- Fieldhouse, E. (1995). 'Thatcherism and the changing geography of political attitudes, 1964-87', *Political Geography*, 14(1), pp. 3-30.
- Flanagan, S.C. and Lee, A-R (2003). 'The new politics, culture wars, and the authoritarian-libertarian value change in advanced industrial democracies', *Comparative Political Studies*, 36(3), pp. 235-270.
- Fleishman, J. A. (1988). 'Attitude organization in the general public: Evidence for a bidimensional structure', *Social Forces*, 67(1), pp. 159-184.
- Ford, R. and Goodwin, M. J. (2014). *Revolt on the Right: Explaining Support for the Radical Right in Britain*. Abingdon: Routledge.
- Franklin, M.N., Mackie, T.T. and Valen, H. (1992). *Electoral Change: Responses to Evolving Social and Attitudinal Structures in Western Countries*. Colchester: ECPR Press
- Freire, A. (2006). 'Bringing social identities back in: The social anchors of left-right orientation in Western Europe', *International Political Science Review*, 27(4), pp. 359-378.
- Gamble, A. (2010). New Labour and political change, in Geddes, A. and Tonge, J. (eds.) *Britain Votes 2010*. Oxford: Oxford University Press.
- Giddens, A. (1979). *Central Problems in Social Theory: Action, Structure and Contradiction in Social Analysis*. Berkeley: University of California Press.
- Goldthorpe, J.H. with Llewellyn, C. and Payne, C. (1987). *Social Mobility and Class Structure in Modern Britain* (2nd ed.). Oxford: Clarendon Press.
- Goren, P. (2005). 'Party identification and core political values', *American Journal of Political Science* 49(4), pp. 881-897.

- Goren, P., Federico, C.M., and Kittilson, M.C. (2009). 'Source cues, partisan identities and political values expression', *American Journal of Political Science* 53(4), pp. 805-820.
- Haidt, J. (2012). *The Righteous Mind*. London: Penguin.
- Hay, C. (2007). *Why We Hate Politics*. Cambridge: Polity Press.
- Heath, A.F., Evans, G. and Martin, J. (1994). 'The measurement of core beliefs and values: The development of balanced Socialist/Laissez-faire and Libertarian/Authoritarian scales', *British Journal of Political Science*, 24(1), pp. 115-132.
- Heath, A. F., Jowell, R. and Curtice, J. (1985). *How Britain Votes*. Oxford: Pergamon.
- Hellwig, T. (2008). Explaining the salience of left-right ideology in post-industrial democracies: The role of structural economic change. *European Journal of Political Research*, 47(6), pp. 687-709.
- Hibbing, J.R., Smith, K.B. and Alford, J.R. (2013). *Predisposed: Liberals, Conservatives, and the Biology of Political Differences*. New York: Routledge.
- Himmelweit, H.T., Humphreys, P. and Jaeger, M. (1985). *How Voters Decide: a model of vote choice based on a special longitudinal study extending over fifteen years and the British election surveys of 1970-1983*. Milton Keynes: Open University Press
- Hitlin, S. (2003). 'Values as the core of personal identity: Drawing links between two theories of self', *Social Psychology Quarterly*, 66(2), pp. 118-137.
- Hitlin, S. and Piliavin, J. A. (2004). 'Values: Reviving a dormant concept', *Annual Review of Sociology*, 30, pp. 359-393.
- Hug, S. and Kriesi, H. (2010). *Value Change in Switzerland*. Lanham, MA: Lexington Books.
- Hurwitz, J., and Peffley, M. (1987). 'How are foreign policy attitudes structured? A hierarchical model', *American Political Science Review*, 81(04), pp. 1099-1120.
- Inglehart, R. (1971). 'Silent revolution in Europe - intergenerational change in post-industrial societies', *American Political Science Review*, 65(4), pp. 991-1017.
- Inglehart, R. (1979). 'Political Action: The impact of values, cognitive level, and social background', *Political action: Mass participation in five Western democracies*, pp. 343-380.
- Inglehart, R. (1990). *Culture shift in advanced industrial society*. Princeton University Press.
- Inglehart, R. (1997). *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*. Princeton, NJ: Princeton University Press.
- Inglehart, R. (2004). *Human Beliefs and Values: a Cross-cultural Sourcebook Based on the 1999-2002 Values Surveys*. 1st edn. México: Siglo XXI.
- Inglehart, R. and Flanagan, S. C. (1987). 'Value change in industrial societies', *American Political Science Review*, 81(4), pp. 1289-1319.
- Inglehart, R. and Klingemann, H. D. (1976). 'Party identification, ideological preference and the left-right dimension among Western mass publics', *Party identification and beyond: representations of voting and party competition*, pp. 243-273.

- Inglehart, R. and Welzel, C. (2005). *Modernization, Cultural Change and Democracy: the Human Development Sequence*. Cambridge: Cambridge University Press.
- Inglehart, R. and Welzel, C. (2010). 'Changing mass priorities: The link between modernization and democracy', *Perspectives on Politics*, 8(02), pp. 551-567.
- Jacoby, W.G. (2006). 'Value choices and American public opinion', *American Journal of Political Science*, 50(3), pp. 706-723.
- Johnston, R.J. and Pattie, C.J. (2006). *Putting Voters in their Place: Geography and Elections in Great Britain*. Oxford: Oxford University Press.
- Johnston, R.J., Pattie, C., Rossiter, D., Dorling, D., Tunstall, H. and MacAllister, I. (1998). 'Anatomy of a Labour landslide: the constituency system and the 1997 general election', *Parliamentary Affairs*, 51(2), 131-148.
- Jost, J.T., Glaser, J., Kruglanski, A.W. and Sulloway, F.J. (2003). 'Political conservatism as motivated social cognition', *Psychological Bulletin*, 129(3), pp. 339-375.
- Kertzer, J.D., Powers, K.E., Rathbun, B.C. and Iyer, R. (2014) 'Moral support: How moral values shape foreign policy attitudes', *The Journal of Politics*, 76(3), pp. 825-840.
- Kinder, D. R. (1983). 'Diversity and complexity in American public opinion', in, Finifter, A. W. (ed.), *Political science: The state of the discipline*, Washington, DC: American Political Science Association. pp. 389-425.
- Kitschelt, H. (1994). *The Transformation of European Social Democracy*. Cambridge: Cambridge University Press.
- Kitschelt, H. and Hellemans, S. (1990). 'The Left-Right semantics and the New Politics cleavage', *Comparative Political Studies*, 23(2), pp. 210-238.
- Klingemann, H-D., Hofferbert, R.I. and Budge, I. (1994). *Parties, Policies and Democracy*. Boulder, Col: Westview Press.
- Kluckhohn, C. and Murray, H. A. (eds.) (1953). *Personality in Nature, Society, and Culture*. New York: Knopf.
- Knutsen, O. (1995a). Party Choice, in Van Deth, J.W and Scarbrough, E. (eds.) *The Impact of Values*. Oxford: Oxford University Press, pp. 461-491.
- Knutsen, O. (1995b). 'Value orientations, political conflicts and left-right identification: A comparative study', *European Journal of Political Research*, 28(1), pp. 63-93.
- Knutsen, O. (1995c). 'The impact of old politics and new politics value orientations on party choice—a comparative study', *Journal of Public Policy*, 15(01), pp. 1-63.
- Knutsen, O. R. (1998). 'Expert judgements of the left-right location of political parties: A comparative longitudinal study', *West European Politics*, 21(2), pp. 63-94.
- Knutsen, O. and Kumlin, S. (2005). Value orientations and party choice ', in Thomassen, J. J. (ed.) *The European Voter. A Comparative Study of Modern Democracies*. Oxford: Oxford University Press, pp. 125-166.
- Konstantinidis, I. (2011). 'The impact of value orientations on election outcomes', *Comparative European Politics*, 9(1), pp. 38-51.

- Kriesi, H., Grande, E., Dolezal, M., Helbling, M., Höglinger, D., Hutter, S. and Wüest, B. (2012). *Political Conflict in Western Europe*. Cambridge: Cambridge University Press.
- Kriesi, H., Grande, E., Lachat, R., Dolezal, M., Bornschier, S. and Frey, T. (2008). *West European Politics in the Age of Globalization*. Cambridge: Cambridge University Press.
- Lachat, R. (2008). 'The impact of party polarization on ideological voting', *Electoral Studies*, 27(4), pp. 687–698.
- Lachat, R. and Dolezal, M. (2008). Demand side: de-alignment and re-alignment, in Kriesi, H., Grande, E., Lachat, R., Dolezal, M., Bornschier, S. and Frey, T. [eds.] *West European Politics in the Age of Globalisation*. Cambridge: Cambridge University Press, pp. 237-265.
- Lakoff, G. (2009). *The Political Mind: A Cognitive Scientist's Guide to Your Brain and its Politics*. New York: Penguin Books.
- Lane, R. E. (1962). *Political Ideology*. New York: Free Press.
- Lefkofridi, Z., Wagner, M. and Willmann, J. E. (2014). 'Left-authoritarians and policy representation in Western Europe: Electoral choice across ideological dimensions', *West European Politics*, 37(1), pp. 65-90.
- Leimgruber, P. (2011). 'Values and votes: the indirect effect of personal values on voting behaviour', *Swiss Political Science Review*, 17(2), pp. 107-127.
- Lewis-Beck, M.S. and Stegmaier, M. (2000). 'Economic determinants of electoral outcomes', *Annual Review of Political Science*, 3(1), pp. 183-219.
- Lipset, S.M. and Rokkan, S. (1967). *Party Systems and Voter Alignments: Cross-national Perspectives*. New York: Free Press.
- Luttbeg, N., R. (1968). 'The structure of beliefs among leaders and the public', *Public Opinion Quarterly*, 32(3), pp.398-409.
- MacKinnon, D.P., Fairchild, A.J. and Fritz, M.S. (2007). 'Mediation analysis', *Annual Review of Psychology*, 58, pp. 593-615.
- Maio, G.R. and Olson, J.M. (1998). 'Values as truisms: Evidence and implications', *Journal of Personality and Social Psychology*, 74(2), pp. 294-311.
- Mair, P. (1997). *Party system change: approaches and interpretations*. Oxford: Clarendon Press.
- Manza, J., Hout, M. and Brooks, C. (1995). 'Class voting in capitalist democracies since World War II: dealignment, realignment, or trendless fluctuation?', *Annual Review of Sociology*, 21, pp. 137-162.
- Marietta M. and Barker, D. (2007). 'Values as heuristics: Core beliefs and voter sophistication in the 2000 Republican nomination contest', *Journal of Elections, Public Opinion and Parties*, 17(1), pp. 49-78.
- Marsh, M., and Mikhaylov, S. (2012). 'Economic voting in a crisis: The Irish election of 2011', *Electoral Studies*, 31(3), pp. 478-484.
- Maslow, A. (1954). *Motivation and Human Need*. New York: Harper Collins.

- Matthews, M., Levin, S. and Sidanius, J. (2009). A longitudinal test of the model of political conservatism as motivated social cognition, *Political Psychology*, 30(6), pp. 921-936.
- McCann, J.A. (1997). 'Electoral choices and core values change: The 1992 presidential campaign', *American Journal of Political Science*, 41(2), pp. 564-583.
- Meuleman, B. and Billiet, J. (2011). Religious involvement: Its relation to values and social attitudes, in Davidov, E., Schmidt, P. and Billiet, J. (eds.). *Cross-Cultural Analysis: Methods and Applications*. New York: Routledge, pp. 173-206.
- Miller, W.L., White, S. and Heywood, P. (1998). 'Political values underlying partisan cleavages in former communist countries', *Electoral Studies*, 17(2), pp. 197-216.
- Muthén, B.O. (2011). Applications of Causally Defined Direct and Indirect Effects in Mediation Analysis using SEM in Mplus. *Mplus Stat Model* (online), available at <https://www.statmodel.com/Mediation.shtml> (Accessed 30 July 2015).
- Muthén, B.O. and Asparouhov T. (2015). 'Causal effects in mediation modeling: An introduction with applications to latent variables', *Structural Equation Modeling: A Multidisciplinary Journal*, 22(1), pp.12-23.
- Muthén, L.K. and Muthén, B.O. (1998-2010). *Mplus User's Guide*. (6th edn.) Los Angeles, CA: Muthén & Muthén
- Nie, N. H. and Andersen, K. (1974). 'Mass belief systems revisited: Political change and attitude structure', *Journal of Politics*, 36(03), pp. 540-591.
- Norris, P. (1997). *Electoral Change Since 1945*. Oxford: Blackwell.
- Norris, P. (ed.) (1999). *Critical Citizens: Global Support for Democratic Government*. Oxford: Oxford University Press.
- Norris, P. and Inglehart, R. (2004). *Sacred and Secular: Religion and Politics Worldwide*. Cambridge: Cambridge University Press.
- Parsons, T. (1949). *The Structure of Social Action: a study in social theory with special reference to a group of recent European writers*. New York: Free Press.
- Peffley, M. A. and Hurwitz, J. (1985). 'A hierarchical model of attitude constraint', *American Journal of Political Science*, pp. 871-890.
- Peffley, M., Knigge, P. and Hurwitz, J. (2001). 'A multiple values model of political tolerance', *Political Research Quarterly*, 54(2), pp. 379-406.
- Petersen, M. B., Slothuus, R., and Togeby, L. (2010). 'Political parties and value consistency in public opinion formation', *Public Opinion Quarterly*, 74(3), pp.530-550.
- Pickup, M. and Evans, G. (2013). 'Addressing the endogeneity of economic evaluations in models of political choice', *Public Opinion Quarterly*, 77(3), pp. 735-754.
- Piurko, Y., Schwartz, S.H. and Davidov, E. (2011). 'Basic personal values and the meaning of left-right political orientations in 20 Countries', *Political Psychology*, 32(4), pp. 537-561.
- Putnum, R.D. and Campbell, D.E. (2010). *American Grace: How Religion Divides and Unites Us*. New York: Simon and Schuster.
- Raymond, C. (2011). 'The continued salience of religious voting in the United States, Germany and Great Britain', *Electoral Studies*, 30(1), pp. 125-135.

- Richards, D. and Smith, M.J. (2015). 'In defence of British politics against the British political tradition', *The Political Quarterly*, 86(1), pp. 41-51.
- Rokeach, M. (1969). *Beliefs, Attitudes and Values: A Theory of Organization and Change*. San Francisco: Jossey-Bass.
- Rokeach, M. (1973). *The Nature of Human Values*. New York: Free Press.
- Rose, R. and McAllister, I. (1990). *The Loyalties of Voters: A Lifetime Learning Model*. London: Sage.
- Rossteutscher, S. (2004). 'Explaining politics: An empirical test of competing value measures', *European Journal of Political Research*, 43(5), pp. 769-795.
- Sanders, D., Clarke, H.D, Stewart, M.C and Whiteley, P. (2008). 'The endogeneity of preferences in spatial models: Evidence from the 2005 British Election Study', *Journal of Elections, Public Opinion and Parties*, 18(4), pp. 413-431.
- Sartori, G. (1976). *Parties and Party Systems: A Framework for Analysis*. Cambridge: Cambridge University Press.
- Schattschneider, E.E. (1948). *The Struggle for Party Government*. College Park, MD: Program in American Civilization, University of Maryland.
- Schmitt, H. and van der Eijk, C. (2010) Meaning components of left and right: A comparative analysis of the impact of party manifestos on voter left-right cognitions across four decades and 10 European countries, *Annual Meeting of the American Political Science Association*, Chicago. 2nd -5th September 2010. Available at SSRN: <http://ssrn.com/abstract=1642514> (Accessed: 28th August 2014).
- Schwartz, S.H. (1992). 'Universals in the content and structure of values - Theoretical advances and empirical tests in 20 Countries', *Advances in Experimental Social Psychology*, 25(1), pp. 1-65.
- Schwartz, S.H. (1994). 'Are there universal aspects in the structure and contents of values?', *Journal of Social Issues*, 50(4), pp. 19-45.
- Schwartz, S.H. (2003). 'Computing Scores for the 10 Human Values'. *European Social Survey*, [online]. Available at: http://ess.nsd.uib.no/ess/doc/ess1_human_values_scale.pdf (Accessed 25 June 2011).
- Schwartz, S.H., Caprara, G.V. and Vecchione, M. (2010). 'Basic personal values, core political values, and voting: a longitudinal analysis', *Political Psychology*, 31(3), pp. 421-452.
- Schwartz, S. H., Caprara, G. V., Vecchione, M., Bain, P., Bianchi, G., Caprara, M. G., Cieciuch, J. and Zaleski, Z. (2014). 'Basic personal values underlie and give coherence to political values: A cross national study in 15 countries', *Political Behavior*, 36(4), pp. 899-930.
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Ramos, A. Beierlein, C. and Konty, M. (2012). 'Refining the theory of basic individual values', *Journal of Personality and Social Psychology*, 103(4), pp. 663-688.
- Schwartz, S.H., Melech, G., Lehmann, A., Burgess, S., Harris, M. and Owens, V. (2001). 'Extending the cross-cultural validity of the theory of basic human values with a different method of measurement', *Journal of Cross-Cultural Psychology*, 32(5), pp. 519-542.

- Schwartz, S. and Vecchione, M. (2008). 'Basic values, core political values and political preference', *International Journal of Psychology*, 43(3-4), pp. 182.
- Stokes, D.E. (1963). 'Spatial models of party competition', *American Political Science Review*, 57(2), pp. 368-377.
- SurrIDGE, P. (2012). 'A reactive core? The configuration of values in the British electorate 1986-2007', *Journal of Elections, Public Opinion and Parties*, 22(1), pp. 51-76.
- Swedlow, B. and Wyckoff, M. L. (2009). 'Value preferences and ideological structuring of attitudes in American public opinion', *American Politics Research*, 37(6), pp.1048-1087.
- Tetlock, P. (1986). 'A value pluralism model of ideological reasoning', *Journal of Personality and Social Psychology*, 50(4), pp. 819-827.
- Thorisdottir, H., Jost, J.T., Liviatan, I. and Shrout, P.E (2007). 'Psychological needs and values underlying left-right political orientation: Cross-national evidence from Eastern and Western Europe', *Public Opinion Quarterly*, 71(2), pp. 175-203.
- Tilley, J. (2002). 'Is youth a better predictor of sociopolitical values than is nationality?' *The ANNALS of the American Academy of Political and Social Science*, 580(1), pp. 226-256.
- Tilley, J. (2005). 'Research Note: Libertarian-authoritarian value change in Britain, 1974-2001', *Political Studies*, 53(2), pp. 442-453.
- Van der Brug, W. (1999). 'Voters perceptions and party dynamics', *Party Politics*, 5(2), pp. 147-169.
- Van der Brug, W. (2001) 'Analysing Party Dynamics by Taking Partially Overlapping Snapshots', in M.Laver (ed.), *Estimating the Policy Position of Political Actors*. London: Routledge, pp. 115-32.
- van der Brug, W., van der Eijk, C. and Franklin, M. N. (2007). *The Economy and the Vote: Economic Conditions and Elections in Fifteen Countries*. Cambridge: Cambridge University Press.
- van der Waal, J., Achterberg, P. and Houtman, D. (2007). 'Class is not dead - it has been buried alive: Class voting and cultural voting in post-war Western Societies (1956 - 1990)', *Politics and Society*, 35(3), pp. 403-426.
- Van Deth, J.W and Scarbrough, E. (eds.) (1995a). *The Impact of Values*. Oxford: Oxford University Press.
- Van Deth, J.W and Scarbrough, E. (1995b). 'Introduction: the concept of values', in Van Deth, J. W. and Scarbrough, E. (eds.) *The impact of values*. Oxford: Oxford University Press, pp. 1-18.
- Vecchione, M., Caprara, G.V., Dentale, F. and Schwartz, S. H. (2013). 'Voting and values: reciprocal effects over time', *Political Psychology*, 34(4), pp. 465-485.
- Vecchione, M., Gonzalez Castro, J.L. and Caprara, G.V. (2011). 'Voters and leaders in the mirror of politics: Similarity in personality and voting choice in Italy and Spain', *International Journal of Psychology*, 46(4), pp. 259-270.

- Verplanken, B. and Holland, R. W. (2002). 'Motivated decision-making: Effects of activation and self-centrality of values on choices and behavior', *Journal of Personality and Social Psychology*, 82(3), pp. 434-447.
- Voas, D. (2014). 'Towards a sociology of attitudes', *Sociological Research Online*, 19(1). Available at: <http://www.socresonline.org.uk/19/1/12.html> (Accessed: 01 September 2014).
- Volken, A., Lehmann, P. Merz, N., Regel S., Werner A. with Schultze H. (2014). *The Manifesto Data Collection. Manifesto Project (MRG/CMP/MARPOR). Version 2014b*. Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB).
- Weakliem, D.L. (1989). 'Class and party in Britain, 1964-83', *Sociology*, 23(2), pp. 285-297.
- Weakliem D.L., (2013). The United States – Still the politics of diversity, in Evans, G. and De Graaf, N.D. (eds.) *Political Choice Matters: Explaining the Strength of Class and Religious Cleavages in Cross-National Perspective*. Oxford: Oxford University Press, pp. 114-136.
- Welzel, C. and Inglehart, R. (2016). 'Misconceptions of Measurement Equivalence', *Comparative Political Studies*, [online]. Available at Sage: <http://cps.sagepub.com/content/early/2016/02/02/0010414016628275.abstract> (Accessed: 1 March 2016).
- Wessels, B. and Schmitt, H. (2008). 'Meaningful choices, political supply, and institutional effectiveness', *Electoral Studies*, 27(1), pp. 19-30.
- Westen, D. (2007). *The Political Brain: The Role of Emotion in Deciding the Fate of the Nation*. New York: PublicAffairs.
- Wildavsky, A. (1987). 'Choosing preferences by constructing institutions: A cultural theory of preference formation', *American Political Science Review*, 81(1), pp.3-21.
- Wilson, M. (2004). 'Values and political ideology: Rokeach's two-value model in a proportional representation environment', *New Zealand Journal of Psychology*, 33(3), pp. 155-162.
- Zaller, J.R. (1992). *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.

APPENDIX 1

List of articles used in Chapter 1 Methods Review

Alvarez, R. M. and Brehm, J. (1995). 'American ambivalence towards abortion policy: a heteroskedastic probit method for assessing conflicting values', *American Journal of Political Science*, 39(4), pp. 1055-82.

Alvarez, R. M. and Brehm, J. (1997). 'Are Americans ambivalent towards racial policies?', *American Journal of Political Science*, 41(2), pp. 345-74.

Arikan, G. and Bloom, P. (2013). 'The influence of societal values on attitudes towards immigration', *International Political Science Review*, 34(2), pp. 210-226.

Babula, M. (2007). 'Political values in a threat environment', *PS: Political Science and Politics*, 40(2), pp. 319-324.

Barker, D.C. and Carman, C.J. (2000). 'The spirit of capitalism? Religious doctrine, values, and economic attitude constructs', *Political Behaviour*, 22(1), pp. 1-27.

Barker, D.C. and Tinnick, J.D. (2006). 'Competing visions of parental roles and ideological constraint', *The American Political Science Review*, 100(2), pp. 249-263.

Barnea, M. F. and Schwartz, S. H. (1998). 'Values and voting', *Political Psychology*, 19(1), pp. 17-40.

Braithwaite, V. (1998). 'Consensus, stability and meaning in abstract social values', *Australian Journal of Political Science*, 33(3), pp. 363-380.

Caprara, G.V., Schwartz, S., Capanna, C., Vecchione, M. and Barbaranelli, C. (2006). 'Personality and politics: Values, traits, and political choice', *Political Psychology*, 27(1), pp. 1-28.

Carmines, E.G. and Layman, G.C. (1997). 'Value priorities, partisanship and electoral choice: The neglected case of the United States', *Political Behaviour*, 19(4), pp. 283-316.

Charnock, D. and Ellis, P. (2004). 'Postmaterialism and postmodernization in Australian electoral politics' *Electoral Studies*, 23, pp. 45-72.

Clarke, H.D., Dutt, N. and Rapkin, J. (1997). 'Conversations in context: The (mis)measurement of value change in advanced industrial societies', *Political Behaviour*, 19(1), pp. 19-39.

Craig, S.C., Martinez, M.D. and Kane, J.G. (2005). 'Core values, value conflict, and citizens' ambivalence about gay rights', *Political Research Quarterly*, 58(1), pp. 5-17.

Davidov, E., Meuleman, B., Billiet, J. and Schmidt, P. (2008). 'Values and support for immigration: A cross-country comparison', *European Sociological Review*, 24(5), pp. 583-599.

Davis, D. W., and Davenport, C. (1999). 'Assessing the validity of the postmaterialism index', *The American Political Science Review*, 93(3), pp. 649-664.

De Koster, W. and van der Waal, J. (2007). 'Cultural value orientations and Christian religiosity: On moral traditionalism, authoritarianism, and their implications for voting behavior', *International Political Science Review*, 28(4), pp. 451-467.

Doherty, D. (2008). 'Presidential rhetoric, candidate evaluations, and party identification: Can parties "Own" values?', *Political Research Quarterly*, 61(3), pp. 419-433.

- Feldman, S. (1988). 'Structure and consistency in public opinion: The role of core beliefs and values', *American Journal of Political Science*, 32(2), pp. 416-440.
- Feldman, S. (2003). 'Enforcing social conformity: A theory of authoritarianism', *Political Psychology*, 24(1), pp.41-74.
- Flanagan, S.C. and Lee, A-R (2003). 'The new politics, culture wars, and the authoritarian-libertarian value change in advanced industrial democracies', *Comparative Political Studies*, 36(3), pp. 235-270.
- Goren, P. (2005). 'Party identification and core political values', *American Journal of Political Science* 49(4), pp. 881-897.
- Goren, P., Federico, C.M., and Kittilson, M.C. (2009). 'Source cues, partisan identities and political values expression', *American Journal of Political Science* 53(4), pp. 805-820.
- Hayes, B.C, McAllister, I. and Studley, D.T. (2000). 'Gender, postmaterialism, and feminism in comparative perspective', *International Political Science Review*, 21(4), pp. 425-439.
- Henry, P.J. and Reyna, C. (2007). 'Value judgments: The impact of perceived value violations on American political attitudes', *Political Psychology*, 28(3), pp. 273-298.
- Jacoby, W.G. (2006). 'Value choices and American public opinion', *American Journal of Political Science*, 50(3), pp. 706-723.
- Knutsen, O. G. (1995a). Party Choice, in Van Deth, J.W and Scarbrough, E. (eds.) *The Impact of Values*. Oxford: Oxford University Press, pp. 461-491.
- Knutsen, O. (1995b). 'Value orientations, political conflicts and left-right identification: A comparative study', *European Journal of Political Research*, 28(1), pp. 63-93.
- Kroh, M. (2009). 'The preadult origins of postmaterialism: A longitudinal sibling study', *European Journal of Political Research*, 48(5), pp. 598-621.
- Leimgruber, P. (2011). 'Values and votes: the indirect effect of personal values on voting behavior', *Swiss Political Science Review*, 17(2), pp. 107-127.
- Marietta M. and Barker, D. (2007). 'Values as heuristics: Core beliefs and voter sophistication in the 2000 Republican nomination contest', *Journal of Elections, Public Opinion and Parties*, 17(1), pp. 49-78.
- Middendorp, C.P. (1992). 'Left-right self-identification and (post)materialism in the ideological space; their effect on the vote in the Netherlands', *Electoral Studies*, 11(3), pp. 249-260.
- Miller, W.L., White, S. and Heywood, P. (1998). 'Political values underlying partisan cleavages in former communist countries', *Electoral Studies*, 17(2), pp. 197-216.
- Mohler, P. (1987). 'Cycles of value change', *European Journal of Political Research*, 15(2), pp. 155-165.
- Nelson, T.E., Gwiasda, G. and Lyons, J. (2011). 'Vilification and values', *Political Psychology*, 32(5), pp. 813-835.
- Palmer, H.D. (1995). 'Effects of authoritarian and libertarian values on Conservative and Labour party support in Great Britain', *European Journal of Political Research* 27(3), pp. 273-292.

- Peffley, M., Knigge, P. and Hurwitz, J. (2001). 'A multiple values model of political tolerance', *Political Research Quarterly*, 54(2), pp. 379-406.
- Petersen, M.B., Slothuus, R., Stubager, R. and Togeby, L. (2011). 'Deservingness versus values in public opinion on welfare: The automaticity of the deservingness heuristic', *European Journal of Political Research*, 50(1), pp. 24-52.
- Petersen, M.B., Slothuus, R. and Togeby, L. (2010). 'Political parties and value consistency in public opinion formation', *Public Opinion Quarterly*, 74(3), pp. 530-550.
- Piurko, Y., Schwartz, S.H. and Davidov, E. (2011). 'Basic personal values and the meaning of left-right political orientations in 20 Countries', *Political Psychology*, 32(4), pp. 537-561.
- Rahn, W.M. and Transue, J.E (1998). 'Social trust and value change: The decline of social capital in American youth, 1976-1995', *Political Psychology*, 19(3), pp. 545-565.
- Roccas, S., Schwartz, S.H. and Amit, A. (2010). 'Personal value priorities and national identification', *Political Psychology*, 31(3), pp. 393-419.
- Rossteutscher, S. (2004). 'Explaining politics: An empirical test of competing value measures', *European Journal of Political Research*, 43(5), pp. 769-795.
- Schwartz, S.H., Caprara, G.V. and Vecchione, M. (2010). 'Basic personal values, core political values, and voting: A longitudinal analysis', *Political Psychology*, 31(3), pp. 421-452.
- Soss, J., Langbein, L. and Metelko, A.R. (2003). 'Why do white Americans support the death penalty?', *Journal of Politics*, 65(2), pp. 397-421.
- Studlar, D.T. and Welch, S. (1981). 'Mass attitudes on political issues in Britain', *Comparative Political Studies*, 14(3), pp. 327-355.
- SurrIDGE, P. (2012). 'A reactive core? The configuration of values in the British electorate 1986-2007', *Journal of Elections, Public Opinion and Parties*, 22(1), pp. 51-76.
- Swedlow, B. and Wyckoff, M.L. (2009). 'Value preferences and ideological structuring of attitudes in American public opinion', *American Politics Research*, 37(6), pp. 1048-1087.
- Thorisdottir, H., Jost, J., Liviatan, I. and Shrout, P.E. (2007). 'Psychological needs and values underlying left-right political orientation: Cross-national evidence from Eastern and Western Europe', *Public Opinion Quarterly*, 71(2), pp. 175-203.
- Tilley, J. (2002). 'Is youth a better predictor of socio-political values than is nationality?', *The Annals of the American Academy of Political and Social Science*, 580(1), pp. 226-256.
- Tranter, B., and Western, M. (2003). 'Postmaterial values and age: The case of Australia', *Australian Journal of Political Science*, 38(2), pp.239-257.
- Western, M. and Tranter, B. (2001). 'Postmaterialist and economic voting in Australia, 1990-98', *Australian Journal of Political Science*, 36(3), pp. 439-458.

Appendix 2

CFA Factor Model Applied to Eastern Europe Data

	<i>Eastern Europe</i>
<i>N</i>	<i>13356</i>
<i>Traditionalism</i>	
TRAD1 (Homosexuality)	0.668
TRAD2 (Abortion)	0.728
TRAD8 (Divorce)	0.717
<i>Conformity</i>	
CON4 (Soft Drugs)	0.647
CON5 (Avoid Tax)	0.619
CON6 (Avoid Fare)	0.617
<i>Individualism</i>	
IND1 (Responsibility)	0.597
IND3 (Competition)	0.509
IND4 (State vs Freedom)	0.455
<i>Authoritarianism</i>	
AUTH3 (Obedience)	0.206
AUTH5 (Independence)	0.242
AUTH6 (Imagination)	0.019
<i>Factor Correlations</i>	
CONF with TRAD	0.472
AUTH with TRAD	-0.044
CONF with INDIV	0.849
CONF with AUTH	0.522
<i>Modifications</i>	
AUTH5 with AUTH6	0.258
AUTH6 with CONC4	0.174
CONC6 with CONC5	0.719
CONC5 with CONC4	-0.306
<i>Fit Statistics</i>	
<i>X² (DF)</i>	<i>1183.536 (29)</i>
<i>RMSEA</i>	0.078
<i>CFI</i>	0.821
<i>TLI</i>	0.816

APPENDIX 3

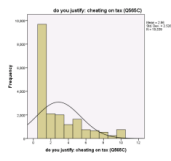
Example of early stage EFA Results including Benevolence and Security Indicators.

2008	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Eigenvalue	4.878	3.76	2.223	2.053	1.683	1.522	1.068
% of Variance Explained	15.16	12.15	7.55	5.83	5.38	4.11	3.36
Homosexuality (TRAD1)	0.645						
Abortion (TRAD2)	0.749						
Co-Habitation (TRAD3)	-0.477						
Homosexual Adoption (TRAD4)	-0.62						
Divorce (TRAD8)	0.72						
Euthanasia (TRAD9)	0.698						
Suicide (TRAD10)	0.454						
Death Penalty (AUTH1)				-0.315			
Children should be taught Obedience (AUTH3)				-0.496			
Children should be taught Independence (AUTH5)				-0.491			
Children should be taught Imagination (AUTH6)				-0.353			
Loss of National Power (SEC1)							-0.887
Loss of National Identity (SEC2)							-0.846
Individual Responsibility (IND1)					-0.563		
Unemployed Take any job - Right to refuse job (IND2)					-0.463		
Competition good - harmful (IND3)					-0.573		
Freedom - State control of firms (IND4)					-0.53		
Care about All Humans (BEN1)			0.466				
Care about Immigrants (BEN2)			0.716				
Care about Unemployed (BEN3)			0.574				
Care about Elderly (BEN4)			0.755				
Care about Sick and Disabled (BEN5)			0.873				
Care about Children in Poor Families (BEN6)			0.817				
False Benefits (CON1)						0.545	
Cheating Tax (CON2)						0.634	
Joyriding (CON3)						0.527	
Soft Drug Use (CON4)						0.455	
Tax Avoidance (CON5)						0.462	
Avoiding Fare (CON6)						0.581	
Immigration Numbers (SEC3)							
Equalise Incomes (EG1)							
<i>N</i>	21004						
<i>RMSEA</i>	0.037						

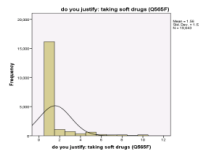
APPENDIX 4

Distribution of Measurement Model Indicators 2008

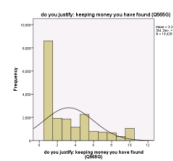
Con 2



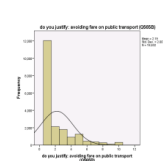
CON4



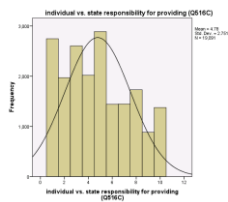
CON5



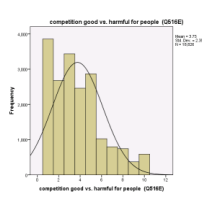
CON6



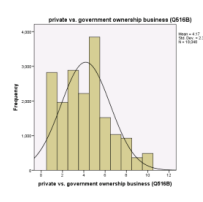
IND1



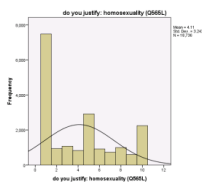
IND3



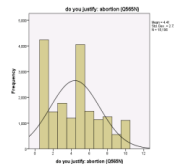
IND4



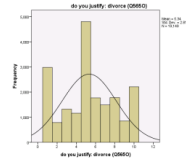
TRAD1



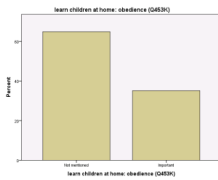
TRAD2



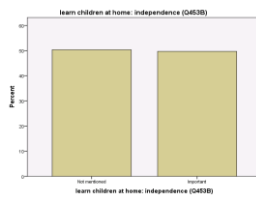
TRAD8



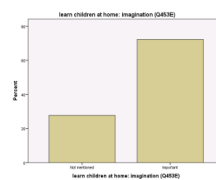
AUTH3



AUTH5



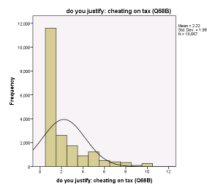
AUTH6



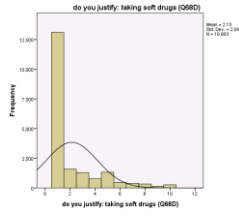
APPENDIX 5

Distribution of Measurement Model Indicators 1990

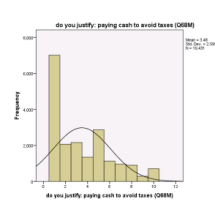
Con 2



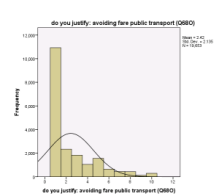
CON4



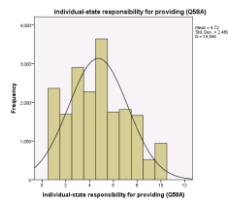
CON5



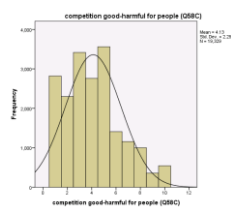
CON6



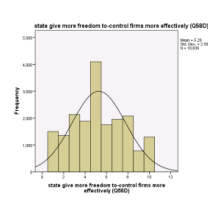
IND1



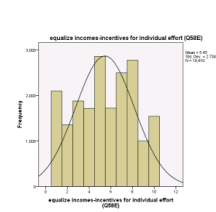
IND3



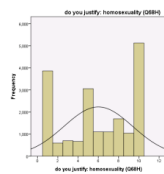
IND4



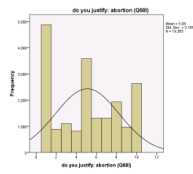
EG1



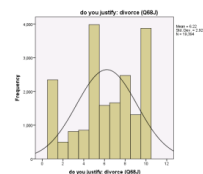
TRAD1



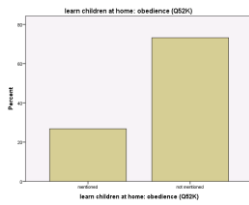
TRAD2



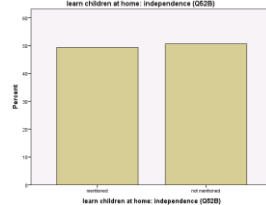
TRAD8



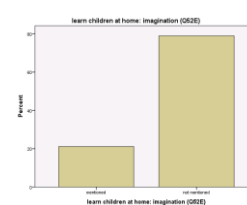
AUTH3



AUTH5



AUTH6



Details of values indicators taken from the 2008 EVS Data

'Traditionalism' indicators

TRAD1 = (Homosexuality) Please tell me for each of the following whether you think Homosexuality can always be justified, never be justified?
(10 point scale running from Never Justified to Always Justified)

TRAD2 = (Abortion) Please tell me for each of the following whether you think Abortion can always be justified, never be justified?
(10 point scale running from Never Justified to Always Justified)

TRAD8 = (Divorce) Please tell me for each of the following whether you think Divorce can always be justified, never be justified?
(10 point scale running from Never Justified to Always Justified)

TRAD9 = (Euthanasia) Please tell me for each of the following whether you think Euthanasia can always be justified, never be justified?
(10 point scale running from Never Justified to Always Justified)

TRAD10 = (Suicide) Please tell me for each of the following whether you think Suicide can always be justified, never be justified.
(10 point scale running from Never Justified to Always Justified)

'Individualism' Indicators

IND1 = (Individual responsibility) How would you place your views on this scale? Individuals should take more responsibility for providing for themselves - The state should take more responsibility to ensure that everyone is provided for.
(Running on a 10-point scale).

IND2 = (Unemployed take any job-have right to refuse) How would you place your views on this scale? People who are unemployed should have to take any job available or lose their unemployment benefits - People who are unemployed should have the right to refuse a job they do not want.
(Running on a 10 point scale)

IND3 = (Competition good vs. harmful) How would you place your views on this scale? Competition is good. It stimulates people to work hard and develop new ideas - Competition is harmful, it brings out the worst in people.
(Running on a 10 point scale)

IND4 = (Freedom for firms vs. more state control of firms) How would you place your views on this scale? The state should give more freedom to firms - The state should control firms more effectively.
(Running on a 10 point scale)

'Conformity' Indicators

CON1 = (False Benefits) Please tell me for each of the following whether you think claiming state benefits to which you are not entitled can always be justified, never be justified?

(10 point scale running from Never Justified to Always Justified)

CON2 = (Cheating Tax) Please tell me for each of the following whether you think cheating on tax if you have the chance can always be justified, never be justified?

(10 point scale running from Never Justified to Always Justified)

CON3 = (Joyriding) Please tell me for each of the following whether you think taking and driving away a car belonging to someone else can always be justified, never be justified?

(10 point scale running from Never Justified to Always Justified)

CON4 = (Marijuana use) Please tell me for each of the following whether you think taking marijuana or hash can always be justified, never be justified?

(10 point scale running from Never Justified to Always Justified)

CON5 = (Tax avoidance) Please tell me for each of the following whether you think paying cash for services to avoid tax can always be justified, never be justified?

(10 point scale running from Never Justified to Always Justified)

CON6 = (Avoiding fare) Please tell me for each of the following whether you think Avoiding a fare on public transport can always be justified, never be justified?

(10 point scale running from Never Justified to Always Justified)

'Authoritarianism' Indicators

AUTH3 = (Obedience in Children) Do you consider Obedience to be especially important in the bringing up of children?

(Mentioned = 1, Not Mentioned = 2)

AUTH5 = (Independence in Children) Do you consider Independence to be especially important in the bringing up of children?

(Mentioned = 1, Not Mentioned = 2)

AUTH6 = (Imagination in Children) Do you consider Imagination to be especially important in the bringing up of children?

(Mentioned = 1, Not Mentioned = 2)

Other variables

EG1 = (Egalitarian indicator) How would you place your views on this scale? Incomes should be more equal – There should be greater incentives for individual efforts.

(Running on a 10 point scale)

Left Right Scale question: Politics is often talked about in terms of Left and Right, where would you place yourself on a 10 points scale running from 1= Left to 10 = Right?

Vote Choice Question: If there was a General Election tomorrow which political party would you vote for?

(Choice of responses dependent on country of survey).

Variables used only in Exploratory Factor Analysis

Altruism/Benevolence Indicators

BEN1 = (Care about 'All Humans) To what extent do you feel concerned about the living conditions of All humans all over the world?
(5 point scale from Very much to Not at all).

BEN2 = (Care about Immigrants) To what extent do you feel concerned about the living conditions of immigrants?
(5 point scale from Very much to Not at all).

BEN3 = (Care about Unemployed) To what extent do you feel concerned about the living conditions of Unemployed?
(5 point scale from Very much to Not at all).

BEN4 = (Care about Elderly) To what extent do you feel concerned about the living conditions of elderly?
(5 point scale from Very much to Not at all).

BEN5 = (Sick and Disabled) To what extent do you feel concerned about the living conditions of Sick and Disabled?
(5 point scale from Very much to Not at all).

BEN6 = (Children in poor families) To what extent do you feel concerned about the living conditions of children in poor families?
(5 point scale from Very much to Not at all).

BENEN = (Income for Environment). I am now going to read out some statements about the environment. For each one read out, can you tell me whether you agree strongly, agree, disagree or strongly disagree? I would give part of my income if I were certain that the money would be used to prevent environmental pollution.
(4 point scale from Agree Strongly to Disagree Strongly).

APPENDIX 7

Example of Final CFA Model *Mplus* Syntax

TITLE: 13 Country Integrated EVS 2008 model.

Data:

FILE = "C:\Users\msrajtl3\Documents\data\EVS2008file.dat";

VARIABLE:

NAMES = study id year c1 c2 weight case

TRAD1 TRAD2 TRAD3 TRAD4 TRAD5 TRAD6 TRAD7 TRAD8 TRAD9 TRAD10

SEC1 SEC2 SEC3 IND1 IND2 IND3 IND4 BEN1 BEN2 BEN3 BEN4 BEN5 BEN6

BENEN

CON1 CON2 CON3 CON4 CON5 CON6 AUTH1 AUTH2 AUTH3 AUTH4 AUTH5

AUTH6 AUTH7

EG1 OTH1 OTH2 OTH3 OTH4 OTH5;

USEVARIABLES = TRAD1 TRAD2 TRAD8 IND1 IND3 IND4

CON4 CON6 AUTH3 AUTH5 AUTH6;

CATEGORICAL = AUTH3 AUTH5 AUTH6;

Missing are all (-1);

ANALYSIS:

TYPE = GENERAL;

ESTIMATOR = WLSMV;

ITERATIONS = 1000;

CONVERGENCE = 0.00005;

MODEL:

TRADIT by TRAD1 TRAD2 TRAD8;

INDIV by IND1 IND3 IND4;

AUTH by AUTH3 AUTH5 AUTH6;

CONFORM by CON4 CON6;

AUTH3 with AUTH5;

AUTH5 with AUTH6;

AUTH6 with CON4;

INDIV with AUTH@0;

INDIV with TRADIT@0;

OUTPUT:

STAND MOD;

APPENDIX 8

Descriptive Data by Country

2008 Descriptive Statistics

2008 Austria Continuous Variables N= 1510						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1484	26	8.34	2.51	1	10
CON2 (Cheating ON Tax).	1490	20	8.31	2.61	1	10
CON3 (Joyriding)	1504	6	9.53	1.43	1	10
CON4 (taking Soft Drugs).	1487	23	8.71	2.46	1	10
CON5 (Keeping money)	1470	40	6.86	3.13	1	10
CON6 (Avoid Fare).	1487	23	7.99	2.74	1	10
TRAD1 (Homosexuality)	1430	80	5.22	3.57	1	10
TRAD2 (Abortion)	1456	54	6.07	3.15	1	10
TRAD8 (Divorce)	1468	42	4.79	3.01	1	10
TRAD9 (Euthanasia)	1427	83	6.02	3.45	1	10
TRAD10 (Suicide)	1413	97	7.35	3.33	1	10
IND1 (Responsibility)	1482	28	6.66	2.74	1	10
IND2 (Unemployed Rights)	1496	14	6.77	2.77	1	10
IND3 (Competition)	1470	40	6.73	2.49	1	10
IND4 (Freedom v State)	1446	64	5.97	2.93	1	10
EG1 (Equalise Incomes)	1471	39	7.31	2.61	1	10
Left Right Scale	1244	266	4.06	3.07	1	10
Political Interest	1506	4	2.36	0.98	1	4
Age	1510	0	46.33	17.71	18	91
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1464	46	13.58			
AUTH5 (Independence)	1491	19	33.91			
AUTH6 (Imagination)	1469	41	76.36			
(Social Class)	% in Class					
Upper	1354	156	27.35			
Middle	1354	156	32.52			
Lower	1354	156	29.8			
Gender	% Male					
	1510	0	43.44			

2008 Belgium N= 1509						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1504	5	8.88	1.94	1	10
CON2 (Cheating ON Tax).	1503	6	7.77	2.59	1	10
CON3 (Joyriding)	1508	1	9.73	0.95	1	10
CON4 (taking Soft Drugs).	1504	5	8.93	1.94	1	10
CON5 (Keeping money)	1494	15	6.54	2.78	1	10
CON6 (Avoid Fare).	1508	1	8.52	2.12	1	10
TRAD1 (Homosexuality)	1490	19	5.09	3.09	1	10
TRAD2 (Abortion)	1506	3	5.91	2.67	1	10
TRAD8 (Divorce)	1497	12	5.21	2.41	1	10
TRAD9 (Euthanasia)	1507	2	4.21	2.61	1	10
TRAD10 (Suicide)	1488	21	7.54	2.62	1	10
IND1 (Responsibility)	1504	5	5.95	2.43	1	10
IND2 (Unemployed Rights)	1507	2	6.59	2.58	1	10
IND3 (Competition)	1497	12	6.28	2.38	1	10
IND4 (Freedom v State)	1484	25	4.99	2.48	1	10
EG1 (Equalise Incomes)	1506	3	5.38	2.54	1	10
Left Right Scale	1422	87	4.71	2.36	1	10
Political Interest	1509	0	2.89	0.93	1	4
Age	1509	0	47.99	17.47	18	100
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1509	0	36.51			
AUTH5 (Independence)	1509	0	32.67			
AUTH6 (Imagination)	1509	0	84.49			
(Social Class)	% in Class					
Upper	1327	182	37.44			
Middle	1327	182	18.95			
Lower	1327	182	31.54			
Gender	% Male					
	1509	0	48.24			

2008 Denmark Continuous Variables N= 1507						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1499	8	9.56	1.35	1	10
CON2 (Cheating ON Tax).	1498	9	9.12	1.77	1	10
CON3 (Joyriding)	1502	5	9.79	1.06	1	10
CON4 (taking Soft Drugs).	1498	9	8.36	2.43	1	10
CON5 (Keeping money)	1488	19	7.08	2.55	1	10
CON6 (Avoid Fare).	1499	8	9.09	1.82	1	10
TRAD1 (Homosexuality)	1478	29	3.65	3.22	1	10
TRAD2 (Abortion)	1481	26	3.46	2.87	1	10
TRAD8 (Divorce)	1492	15	3.24	2.56	1	10
TRAD9 (Euthanasia)	1468	39	4.05	2.93	1	10
TRAD10 (Suicide)	1449	58	7.67	3.12	1	10
IND1 (Responsibility)	1491	16	6.19	2.31	1	10
IND2 (Unemployed Rights)	1492	15	5.99	2.71	1	10
IND3 (Competition)	1486	21	6.91	2.31	1	10
IND4 (Freedom v State)	1442	65	5.71	2.58	1	10
EG1 (Equalise Incomes)	1487	20	4.02	2.48	1	10
Left Right Scale	1447	60	5.17	2.35	1	10
Political Interest	1503	4	2.21	2.2	1	4
Age	1507	0	49.79	16.84	18	95
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1504	3	14.21			
AUTH5 (Independence)	1504	3	20.21			
AUTH6 (Imagination)	1504	3	67.88			
(Social Class)	% in Class					
Upper	1405	102	42.87			
Middle	1405	102	23.29			
Lower	1405	102	27.07			
Gender	% Male					
	1507	0	49.57			

2008 Finland Continuous Variables N= 1134						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1079	55	8.63	2.67	1	10
CON2 (Cheating ON Tax).	1094	40	8.72	2.48	1	10
CON3 (Joyriding)	1101	33	9.33	1.99	1	10
CON4 (taking Soft Drugs).	1096	38	8.38	2.81	1	10
CON5 (Keeping money)	1085	49	7.19	2.89	1	10
CON6 (Avoid Fare).	1099	35	8.08	2.57	1	10
TRAD1 (Homosexuality)	1058	76	3.98	3.58	1	10
TRAD2 (Abortion)	1071	63	4.18	3.36	1	10
TRAD8 (Divorce)	1082	52	3.54	2.7	1	10
TRAD9 (Euthanasia)	1066	68	4.6	3.13	1	10
TRAD10 (Suicide)	1041	93	6.63	3.51	1	10
IND1 (Responsibility)	1080	54	6.11	2.85	1	10
IND2 (Unemployed Rights)	1089	45	5.83	2.98	1	10
IND3 (Competition)	1090	44	6.18	2.58	1	10
IND4 (Freedom v State)	1044	90	5.09	2.78	1	10
EG1 (Equalise Incomes)	1079	55	6.02	2.98	1	10
Left Right Scale	913	221	4.61	3.51	1	10
Political Interest	1124	10	2.73	0.99	1	4
Age	1134	0	46.89	15.12	18	84
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1112	22	19.84			
AUTH5 (Independence)	1112	22	48.32			
AUTH6 (Imagination)	1112	22	73.63			
(Social Class)	% in Class					
Upper	1057	77	44.81			
Middle	1057	77	29.31			
Lower	1057	77	19.05			
Gender	% Male					
	1134	0	49.12			

2008 France Continuous Variables N= 1500						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1492	8	7.32	2.54	1	10
CON2 (Cheating ON Tax)	1496	4	8.51	2.25	1	10
CON3 (Joyriding)	1499	1	9.65	1.2	1	10
CON4 (taking Soft Drugs)	1495	5	9.03	1.98	1	10
CON5 (Keeping money)	1489	11	6.94	2.87	1	10
CON6 (Avoid Fare)	1494	6	8.45	2.29	1	10
TRAD1 (Homosexuality)	1464	36	5.19	3.33	1	10
TRAD2 (Abortion)	1484	16	4.96	2.99	1	10
TRAD8 (Divorce)	1491	9	4.42	2.64	1	10
TRAD9 (Euthanasia)	1485	15	4.21	2.85	1	10
TRAD10 (Suicide)	1466	34	6.51	3.01	1	10
IND1 (Responsibility)	1489	11	6.34	2.55	1	10
IND2 (Unemployed Rights)	1489	11	5.29	2.89	1	10
IND3 (Competition)	1489	20	5.91	2.55	1	10
IND4 (Freedom v State)	1485	15	5.33	2.67	1	10
EG1 (Equalise Incomes)	1487	13	5.71	2.84	1	10
Left Right Scale	1385	115	4.46	2.82	1	10
Political Interest	1500	0	2.63	0.97	1	4
Age	1500	0	50.04	18.42	18	108
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1499	1	27.51			
AUTH5 (Independence)	1499	1	73.15			
AUTH6 (Imagination)	1499	1	83.68			
(Social Class)	% In Class					
Upper	1429	71	38.64			
Middle	1429	71	23.58			
Lower	1429	71	33.04			
Gender	% Male					
	1500	0	45.5			

2008 Germany Continuous Variables N= 2075						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	2056	19	8.87	1.94	1	10
CON2 (Cheating ON Tax)	2060	15	8.96	1.84	1	10
CON3 (Joyriding)	2071	4	9.49	1.26	1	10
CON4 (taking Soft Drugs)	2067	8	9.09	1.84	1	10
CON5 (Keeping money)	2040	35	7.97	2.5	1	10
CON6 (Avoid Fare)	2066	9	8.56	2.06	1	10
TRAD1 (Homosexuality)	1999	76	5.07	3.31	1	10
TRAD2 (Abortion)	2046	29	6.14	2.92	1	10
TRAD8 (Divorce)	2045	30	4.67	2.86	1	10
TRAD9 (Euthanasia)	1996	79	6.04	3.22	1	10
TRAD10 (Suicide)	2009	66	7.33	3.03	1	10
IND1 (Responsibility)	2061	14	6.67	2.61	1	10
IND2 (Unemployed Rights)	2048	27	6.78	2.61	1	10
IND3 (Competition)	2032	43	7.24	2.29	1	10
IND4 (Freedom v State)	2014	61	5.32	2.87	1	10
EG1 (Equalise Incomes)	2049	26	6.71	2.73	1	10
Left Right Scale	1785	290	3.94	2.67	1	10
Political Interest	2073	2	2.17	0.88	1	4
Age	2051	24	49.15	17.36	18	92
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	2068	7	10.02			
AUTH5 (Independence)	2068	7	28.39			
AUTH6 (Imagination)	2068	7	72.63			
(Social Class)	% In Class					
Upper	1817	258	24.67			
Middle	1817	258	25.01			
Lower	1817	258	37.88			
Gender	% Male					
	2075	0	47.71			

2008 Iceland Continuous Variables N= 808						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	802	6	9.42	1.51	1	10
CON2 (Cheating ON Tax)	802	6	8.94	1.91	1	10
CON3 (Joyriding)	802	6	9.29	1.65	1	10
CON4 (taking Soft Drugs)	803	5	8.72	2.25	1	10
CON5 (Keeping money)	799	9	8.33	2.27	1	10
CON6 (Avoid Fare)	797	11	8.14	2.64	1	10
TRAD1 (Homosexuality)	785	23	2.54	2.72	1	10
TRAD2 (Abortion)	794	14	4.91	2.67	1	10
TRAD8 (Divorce)	795	13	3.56	2.29	1	10
TRAD9 (Euthanasia)	777	31	4.98	3.11	1	10
TRAD10 (Suicide)	773	35	8.31	2.89	1	10
IND1 (Responsibility)	801	7	6.04	2.51	1	10
IND2 (Unemployed Rights)	798	10	6.27	2.63	1	10
IND3 (Competition)	801	7	7.84	2.15	1	10
IND4 (Freedom v State)	786	22	5.84	2.61	1	10
EG1 (Equalise Incomes)	800	8	5.55	2.68	1	10
Left Right Scale	762	46	4.99	2.62	1	10
Political Interest	804	4	2.25	0.92	1	4
Age	808	0	45.02	16.85	18	99
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	807	1	12.87			
AUTH5 (Independence)	807	1	17.82			
AUTH6 (Imagination)	807	1	80.45			
(Social Class)	% In Class					
Upper	712	96	42.08			
Middle	712	96	22.15			
Lower	712	96	23.89			
Gender	% Male					
	808	0	49.38			

2008 Ireland Continuous Variables N= 1013						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	997	16	8.81	2.25	1	10
CON2 (Cheating ON Tax)	994	19	8.49	2.42	1	10
CON3 (Joyriding)	1004	9	9.62	1.42	1	10
CON4 (taking Soft Drugs)	1001	12	8.61	2.34	1	10
CON5 (Keeping money)	969	44	7.23	2.99	1	10
CON6 (Avoid Fare)	971	42	7.68	2.88	1	10
TRAD1 (Homosexuality)	930	83	5.23	3.73	1	10
TRAD2 (Abortion)	948	65	7.28	3.33	1	10
TRAD8 (Divorce)	940	73	5.26	3.47	1	10
TRAD9 (Euthanasia)	927	86	6.55	3.56	1	10
TRAD10 (Suicide)	902	111	7.61	3.62	1	10
IND1 (Responsibility)	994	19	6.66	2.75	1	10
IND2 (Unemployed Rights)	975	38	5.91	2.94	1	10
IND3 (Competition)	968	45	6.72	2.87	1	10
IND4 (Freedom v State)	889	124	5.35	3.26	1	10
EG1 (Equalise Incomes)	970	43	5.56	3.08	1	10
Left Right Scale	708	305	3.82	3.52	1	10
Political Interest	998	15	2.63	1.11	1	4
Age	982	31	44.24	19.25		90
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	621	392	57.17			
AUTH5 (Independence)	750	263	38.81			
AUTH6 (Imagination)	750	263	53.73			
(Social Class)	% In Class					
Upper	850	163	26.82			
Middle	850	163	35.88			
Lower	850	163	37.29			
Gender	% Male					
	1013	0	40.28			

2008 Italy Continuous Variables N= 1518						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1473	45	8.86	2.39	1	10
CON2 (Cheating ON Tax).	1491	27	8.56	2.51	1	10
CON3 (Joyriding)	1497	21	9.32	1.81	1	10
CON4 (taking Soft Drugs).	1478	40	8.53	2.65	1	10
CON5 (Keeping money)	1467	51	8.17	2.81	1	10
CON6 (Avoid Fare).	1487	31	8.46	2.51	1	10
TRAD1 (Homosexuality)	0	1518	N/A	N/A	N/A	N/A
TRAD2 (Abortion)	1425	93	6.87	3.49	1	10
TRAD8 (Divorce)	1442	76	5.81	3.35	1	10
TRAD9 (Euthanasia)	1365	153	5.59	3.84	1	10
TRAD10 (Suicide)	1411	107	8.01	3.41	1	10
IND1 (Responsibility)	1464	54	5.02	2.83	1	10
IND2 (Unemployed Rights)	1452	66	7.08	3.01	1	10
IND3 (Competition)	1424	94	6.07	3.11	1	10
IND4 (Freedom v State)	1375	143	4.51	3.21	1	10
EG1 (Equalise Incomes)	1451	67	4.85	3.05	1	10
Left Right Scale	1179	339	3.75	3.61	1	10
Political Interest	1508	10	2.71	0.98	1	4
Age	1518	0	47.89	18.19	18	95
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1513	5	31.53			
AUTH5 (Independence)	1508	10	59.18			
AUTH6 (Imagination)	1506	12	87.23			
(Social Class)						
			% in Class			
Upper	1397	121	22.43			
Middle	1397	121	34.16			
Lower	1397	121	43.41			
% Male						
Gender	1518	0	48.12			

2008 Norway Continuous Variables N= 1090						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1083	7	8.99	1.81	1	10
CON2 (Cheating ON Tax).	1084	6	8.61	2.09	1	10
CON3 (Joyriding)	1085	5	9.51	1.41	1	10
CON4 (taking Soft Drugs).	1085	5	8.92	2.04	1	10
CON5 (Keeping money)	1084	6	7.41	2.51	1	10
CON6 (Avoid Fare).	1084	6	8.64	2.02	1	10
TRAD1 (Homosexuality)	1071	19	3.72	3.28	1	10
TRAD2 (Abortion)	1080	10	4.56	2.92	1	10
TRAD8 (Divorce)	1082	8	3.91	2.44	1	10
TRAD9 (Euthanasia)	1080	10	5.22	2.96	1	10
TRAD10 (Suicide)	1071	19	7.47	2.81	1	10
IND1 (Responsibility)	1086	4	6.11	2.29	1	10
IND2 (Unemployed Rights)	1086	4	6.77	2.38	1	10
IND3 (Competition)	1087	3	7.47	1.97	1	10
IND4 (Freedom v State)	1077	13	6.44	2.31	1	10
EG1 (Equalise Incomes)	1086	4	5.27	2.31	1	10
Left Right Scale	1065	25	5.42	2.15	1	10
Political Interest	1086	4	2.21	0.84	1	4
Age	1090	0	45.84	16.14	18	79
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1086	4	19.45			
AUTH5 (Independence)	1086	4	13.94			
AUTH6 (Imagination)	1086	4	68.99			
(Social Class)						
			% in Class			
Upper	1057	33	44.77			
Middle	1057	33	28.99			
Lower	1057	33	23.21			
% Male						
Gender	1087	3	51.28			

2008 Netherlands Continuous Variables N= 1554						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1551	3	9.51	1.36	1	10
CON2 (Cheating ON Tax).	1548	6	8.71	2.03	1	10
CON3 (Joyriding)	1548	6	9.62	1.18	1	10
CON4 (taking Soft Drugs).	1550	4	8.51	2.31	1	10
CON5 (Keeping money)	1533	21	6.79	2.63	1	10
CON6 (Avoid Fare).	1551	3	8.61	2.03	1	10
TRAD1 (Homosexuality)	1521	33	3.37	2.97	1	10
TRAD2 (Abortion)	1539	15	5.73	3.03	1	10
TRAD8 (Divorce)	1541	13	4.65	2.68	1	10
TRAD9 (Euthanasia)	1536	18	4.33	2.85	1	10
TRAD10 (Suicide)	1487	67	6.87	3.26	1	10
IND1 (Responsibility)	1550	4	6.18	2.21	1	10
IND2 (Unemployed Rights)	1547	7	6.46	2.24	1	10
IND3 (Competition)	1535	19	6.35	2.07	1	10
IND4 (Freedom v State)	1500	54	5.47	2.45	1	10
EG1 (Equalise Incomes)	1547	7	5.21	2.22	1	10
Left Right Scale	1453	101	5.02	2.41	1	10
Political Interest	1553	1	2.35	0.91	1	4
Age	1552	2	54.73	17.45	17	95
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1537	17	28.89			
AUTH5 (Independence)	1543	11	51.74			
AUTH6 (Imagination)	1536	18	76.25			
(Social Class)						
			% in Class			
Upper	1454	100	47.04			
Middle	1454	100	25.23			
Lower	1454	100	21.31			
% Male						
Gender	1554	0	45.11			

2008 Portugal Continuous Variables N= 1553						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1513	40	8.64	2.34	1	10
CON2 (Cheating ON Tax).	1527	26	8.69	2.22	1	10
CON3 (Joyriding)	1544	9	9.35	1.49	1	10
CON4 (taking Soft Drugs).	1512	41	8.83	2.27	1	10
CON5 (Keeping money)	1507	46	8.51	2.49	1	10
CON6 (Avoid Fare).	1531	22	8.84	2.01	1	10
TRAD1 (Homosexuality)	1391	162	6.43	3.72	1	10
TRAD2 (Abortion)	1446	107	6.42	3.45	1	10
TRAD8 (Divorce)	1459	94	4.93	3.09	1	10
TRAD9 (Euthanasia)	1406	147	5.92	3.68	1	10
TRAD10 (Suicide)	1470	83	8.26	2.83	1	10
IND1 (Responsibility)	1488	65	6.21	2.72	1	10
IND2 (Unemployed Rights)	1498	55	6.41	2.75	1	10
IND3 (Competition)	1437	116	6.06	2.81	1	10
IND4 (Freedom v State)	1346	207	4.88	3.19	1	10
EG1 (Equalise Incomes)	1498	55	5.77	2.87	1	10
Left Right Scale	1063	490	2.94	3.37	1	10
Political Interest	1546	7	3.07	0.94	1	4
Age	1553	0	52.96	18.71	18	98
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1532	21	29.43			
AUTH5 (Independence)	1531	22	61.82			
AUTH6 (Imagination)	1513	40	87.83			
(Social Class)						
			% in Class			
Upper	1485	68	7.6			
Middle	1485	68	27.07			
Lower	1485	68	65.31			
% Male						
Gender	1553	0	40.44			

2008 Spain Continuous Variables N= 1500							2008 Sweden Continuous Variables N= 1187						
	Valid	Missing	Mean	SD	Min	Max		Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1446	54	7.99	2.87	1	10	CON1 (False Benefits)	1078	109	8.11	3.46	1	10
CON2 (Cheating ON Tax).	1459	41	8.31	2.56	1	10	CON2 (Cheating ON Tax).	1117	70	8.08	3.14	1	10
CON3 (Joyriding)	1468	32	9.25	2.03	1	10	CON3 (Joyriding)	1126	61	8.82	2.86	1	10
CON4 (taking Soft Drugs).	1461	39	8.22	2.85	1	10	CON4 (taking Soft Drugs).	1119	68	8.19	3.15	1	10
CON5 (Keeping money)	1396	104	6.51	3.41	1	10	CON5 (Keeping money)	1103	84	6.44	3.39	1	10
CON6 (Avoid Fare).	1476	24	7.92	2.75	1	10	CON6 (Avoid Fare).	1114	73	7.22	3.38	1	10
TRAD1 (Homosexuality)	1415	85	4.63	3.47	1	10	TRAD1 (Homosexuality)	1047	140	2.71	3.35	1	10
TRAD2 (Abortion)	1434	66	5.86	3.54	1	10	TRAD2 (Abortion)	1080	107	2.87	2.94	1	10
TRAD8 (Divorce)	1478	22	4.05	2.91	1	10	TRAD8 (Divorce)	1083	104	2.48	2.75	1	10
TRAD9 (Euthanasia)	1352	148	4.39	3.59	1	10	TRAD9 (Euthanasia)	1040	147	3.85	3.36	1	10
TRAD10 (Suicide)	1368	132	7.59	3.64	1	10	TRAD10 (Suicide)	961	226	5.23	4.21	1	10
IND1 (Responsibility)	1418	82	5.05	2.65	1	10	IND1 (Responsibility)	1133	54	6.45	2.87	1	10
IND2 (Unemployed Rights)	1426	74	5.51	2.88	1	10	IND2 (Unemployed Rights)	1127	60	6.16	3.07	1	10
IND3 (Competition)	1398	102	5.65	2.85	1	10	IND3 (Competition)	1125	62	6.89	2.83	1	10
IND4 (Freedom v State)	1383	117	4.63	2.72	1	10	IND4 (Freedom v State)	1060	127	5.66	3.23	1	10
EG1 (Equalise Incomes)	1416	84	5.63	2.94	1	10	EG1 (Equalise Incomes)	1130	57	5.82	2.89	1	10
Left Right Scale	1258	242	3.65	2.89	1	10	Left Right Scale	1025	162	4.59	3.18	1	10
Political Interest	1499	1	2.93	0.96	1	4	Age	1174	13	48.39	16.22	18	75
Age	1497	3	47.75	19.47	18	98	Political Interest	1156	31	2.51	1.04	1	4
Categorical Variables							Categorical Variables						
	Valid	Missing	% Yes					Valid	Missing	% Yes			
AUTH3 (Obedience)	1499	1	29.07				AUTH3 (Obedience)	1186	1	16.26			
AUTH5 (Independence)	1499	1	62.01				AUTH5 (Independence)	1186	1	35.38			
AUTH6 (Imagination)	1499	1	78.81				AUTH6 (Imagination)	1186	1	62.17			
(Social Class)			% in Class				(Social Class)			% in Class			
Upper	1250	250	15.27				Upper	1096	91	42.29			
Middle	1250	250	26.81				Middle	1096	91	28.48			
Lower	1250	250	41.27				Lower	1096	91	21.47			
			% Male							% Male			
Gender	1500	0	43.87				Gender	1179	8	46.67			

2008 United Kingdom Continuous Variables N= 1561						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1554	7	9.39	1.51	1	10
CON2 (Cheating ON Tax).	1552	9	9.09	1.87	1	10
CON3 (Joyriding)	1557	4	9.78	0.99	1	10
CON4 (taking Soft Drugs).	1525	36	8.58	2.37	1	10
CON5 (Keeping money)	1540	21	7.79	2.69	1	10
CON6 (Avoid Fare).	1551	10	8.62	2.11	1	10
TRAD1 (Homosexuality)	1511	50	5.39	3.51	1	10
TRAD2 (Abortion)	1519	42	6.05	3.11	1	10
TRAD8 (Divorce)	1535	26	4.96	2.77	1	10
TRAD9 (Euthanasia)	1492	69	5.14	3.27	1	10
TRAD10 (Suicide)	1481	80	7.14	3.19	1	10
IND1 (Responsibility)	1546	15	7.09	2.47	1	10
IND2 (Unemployed Rights)	1544	17	6.83	2.63	1	10
IND3 (Competition)	1543	18	7.25	2.29	1	10
IND4 (Freedom v State)	1468	93	5.92	2.77	1	10
EG1 (Equalise Incomes)	1521	40	5.39	2.71	1	10
Left Right Scale	1245	316	3.99	3.06	1	10
Age	1550	11	51.69	19.48	16	103
Political Interest	1552	9	2.72	1.06	1	4
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1552	9	41.51			
AUTH5 (Independence)	1557	4	50.81			
AUTH6 (Imagination)	1553	8	69.71			
(Social Class)			% in Class			
Upper	1550	11	36.74			
Middle	1550	11	29.14			
Lower	1550	11	34.12			
			% Male			
Gender	1561	0	42.47			

1990 Descriptive Statistics

1990 Austria Continuous Variables N= 1460						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1449	11	9.26	1.62	1	10
CON2 (Cheating ON Tax)	1447	13	8.93	2.02	1	10
CON3 (Joyriding)	1449	11	9.79	1.15	1	10
CON4 (taking Soft Drugs)	1450	10	9.56	1.49	1	10
CON5 (Keeping money)	1448	12	9.21	1.77	1	10
CON6 (Avoid Fare)	1449	11	9.05	1.89	1	10
TRAD1 (Homosexuality)	1416	44	7.43	3.24	1	10
TRAD2 (Abortion)	1432	28	7.11	2.92	1	10
TRAD8 (Divorce)	1419	41	5.91	3.02	1	10
TRAD9 (Euthanasia)	1428	32	7.14	3.19	1	10
TRAD10 (Suicide)	1417	43	7.83	2.94	1	10
IND1 (Responsibility)	1441	19	7.42	2.72	1	10
IND2 (Unemployed Rights)	1442	18	7.29	2.81	1	10
IND3 (Competition)	1431	29	7.59	2.42	1	10
IND4 (Freedom v State)	1430	30	7.37	2.52	1	10
EG1 (Equalise Incomes)	1439	21	5.46	3.13	1	10
Left Right Scale	1288	172	4.69	2.91	1	10
Political Interest	1450	10	2.48	1.04	1	4
Age	1460	0	46.79	17.07	18	92

Categorical Variables			
	Valid	Missing	% Yes
AUTH3 (Obedience)	1450	10	25.27
AUTH5 (Independence)	1450	10	36.11
AUTH6 (Imagination)	1450	10	75.21

(Social Class)		% In Class	
Upper	1460	0	33.42
Middle	1460	0	19.45
Lower	1460	0	47.12

Gender		% Male	
	1460	0	38.91

1990 Belgium N=2792						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	2714	78	8.12	2.76	1	10
CON2 (Cheating ON Tax)	2735	57	6.73	3.28	1	10
CON3 (Joyriding)	2746	46	9.37	1.85	1	10
CON4 (taking Soft Drugs)	2757	35	9.41	1.79	1	10
CON5 (Keeping money)	2713	79	6.65	3.29	1	10
CON6 (Avoid Fare)	2750	42	8.39	2.55	1	10
TRAD1 (Homosexuality)	2595	197	6.67	3.59	1	10
TRAD2 (Abortion)	2704	88	6.41	2.95	1	10
TRAD8 (Divorce)	2666	126	5.91	2.95	1	10
TRAD9 (Euthanasia)	2599	193	5.54	3.37	1	10
TRAD10 (Suicide)	2592	200	7.59	3.26	1	10
IND1 (Responsibility)	2634	158	5.81	3.17	1	10
IND2 (Unemployed Rights)	2683	109	6.01	3.27	1	10
IND3 (Competition)	2569	223	6.28	3.19	1	10
IND4 (Freedom v State)	2388	404	5.81	3.55	1	10
EG1 (Equalise Incomes)	2689	103	4.86	3.08	1	10
Left Right Scale	1980	812	3.62	3.71	1	10
Political Interest	2740	52	2.96	1.09	1	4
Age	2792	0	44.68	17.27	17	93

Categorical Variables			
	Valid	Missing	% Yes
AUTH3 (Obedience)	2778	14	36.28
AUTH5 (Independence)	2778	14	63.86
AUTH6 (Imagination)	2778	14	81.55

(Social Class)		% In Class	
Upper	2699	93	15.15
Middle	2699	93	22.85
Lower	2699	93	58.67

Gender		% Male	
	2792	0	48.82

1990 Denmark Continuous Variables N= 1030						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1020	10	9.41	1.69	1	10
CON2 (Cheating ON Tax)	1020	10	8.45	2.48	1	10
CON3 (Joyriding)	1024	6	9.86	1.00	1	10
CON4 (taking Soft Drugs)	1021	9	8.84	2.31	1	10
CON5 (Keeping money)	1016	14	8.64	2.47	1	10
CON6 (Avoid Fare)	1026	4	9.20	1.76	1	10
TRAD1 (Homosexuality)	994	36	6.02	3.67	1	10
TRAD2 (Abortion)	0	1030	N/A	N/A	N/A	N/A
TRAD8 (Divorce)	1010	20	4.95	3.07	1	10
TRAD9 (Euthanasia)	968	62	4.92	3.67	1	10
TRAD10 (Suicide)	961	69	7.42	3.64	1	10
IND1 (Responsibility)	1003	27	6.57	2.71	1	10
IND2 (Unemployed Rights)	1005	25	6.22	3.07	1	10
IND3 (Competition)	987	43	6.69	2.91	1	10
IND4 (Freedom v State)	983	47	6.87	2.89	1	10
EG1 (Equalise Incomes)	1005	25	4.32	2.62	1	10
Left Right Scale	934	96	5.02	2.89	1	10
Political Interest	1028	2	2.43	0.92	1	4
Age	1030	0	43.99	17.80	18	90

Categorical Variables			
	Valid	Missing	% Yes
AUTH3 (Obedience)	1025	5	20.19
AUTH5 (Independence)	1025	5	18.74
AUTH6 (Imagination)	1025	5	62.52

(Social Class)		% In Class	
Upper	929	101	22.19
Middle	929	101	31.80
Lower	929	101	46.01

Gender		% Male	
	1030	0	50.10

1990 Finland Continuous Variables N= 588						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	538	50	5.56	3.39	1	10
CON2 (Cheating ON Tax)	575	13	7.63	2.94	1	10
CON3 (Joyriding)	581	7	9.42	1.62	1	10
CON4 (taking Soft Drugs)	581	7	9.22	2.00	1	10
CON5 (Keeping money)	574	14	7.52	2.72	1	10
CON6 (Avoid Fare)	579	9	8.62	2.31	1	10
TRAD1 (Homosexuality)	560	28	6.19	3.63	1	10
TRAD2 (Abortion)	576	12	4.37	3.20	1	10
TRAD8 (Divorce)	578	10	3.68	2.87	1	10
TRAD9 (Euthanasia)	558	30	4.49	3.33	1	10
TRAD10 (Suicide)	550	38	6.56	3.46	1	10
IND1 (Responsibility)	564	24	6.49	2.98	1	10
IND2 (Unemployed Rights)	545	43	7.09	3.05	1	10
IND3 (Competition)	566	22	7.24	2.63	1	10
IND4 (Freedom v State)	536	52	6.53	3.17	1	10
EG1 (Equalise Incomes)	567	21	4.16	2.953637	1	10
Left Right Scale	518	70	5.19	3.291469	1	10
Political Interest	579	9	1.01	13.93251	1	4
Age	588	0	13.93	1.011712	18	89

Categorical Variables			
	Valid	Missing	% Yes
AUTH3 (Obedience)	578	10	25.17
AUTH5 (Independence)	578	10	41.67
AUTH6 (Imagination)	578	10	72.11

(Social Class)		% In Class	
Upper	486	102	17.56
Middle	486	102	34.32
Lower	486	102	48.12

Gender		% Male	
	588	0	51.74

1990 France Continuous Variables N= 1002						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	993	9	7.46	2.74	1	10
CON2 (Cheating ON Tax).	990	12	7.81	2.77	1	10
CON3 (Joyriding)	998	4	9.52	1.49	1	10
CON4 (taking Soft Drugs).	992	10	9.26	1.98	1	10
CON5 (Keeping money)	989	13	7.04	3.15	1	10
CON6 (Avoid Fare).	993	9	8.29	2.49	1	10
TRAD1 (Homosexuality)	958	44	6.73	3.32	1	10
TRAD2 (Abortion)	978	24	5.84	2.85	1	10
TRAD8 (Divorce)	977	25	5.19	2.75	1	10
TRAD9 (Euthanasia)	966	36	5.57	3.19	1	10
TRAD10 (Suicide)	965	37	6.86	3.04	1	10
IND1 (Responsibility)	971	31	6.61	2.78	1	10
IND2 (Unemployed Rights)	982	20	6.44	2.97	1	10
IND3 (Competition)	970	32	6.71	2.77	1	10
IND4 (Freedom v State)	934	68	6.15	2.95	1	10
EG1 (Equalise Incomes)	983	19	5.61	2.95	1	10
Left Right Scale	792	210	3.53	3.12	1	10
Political Interest	994	8	2.84	1.00	1	4
Age	1002	0	42.85	17.22	18	92
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	999	3	52.79			
AUTH5 (Independence)	999	3	73.05			
AUTH6 (Imagination)	999	3	77.05			
(Social Class)				% In Class		
Upper	906	96	23.75			
Middle	906	96	53.29			
Lower	906	96	22.95			
				% Male		
Gender	1002	0	47.21			

1990 Germany Continuous Variables N= 3437						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	3393	44	8.93	2.02	1	10
CON2 (Cheating ON Tax).	3380	57	8.28	2.54	1	10
CON3 (Joyriding)	3424	13	9.75	1.08	1	10
CON4 (taking Soft Drugs).	3420	17	9.55	1.51	1	10
CON5 (Keeping money)	3327	110	7.55	2.99	1	10
CON6 (Avoid Fare).	3407	30	8.84	2.01	1	10
TRAD1 (Homosexuality)	3125	312	6.03	3.84	1	10
TRAD2 (Abortion)	3168	269	5.97	3.22	1	10
TRAD8 (Divorce)	3154	283	5.01	3.16	1	10
TRAD9 (Euthanasia)	3127	310	6.23	3.70	1	10
TRAD10 (Suicide)	3157	280	7.24	3.46	1	10
IND1 (Responsibility)	3338	99	6.60	3.02	1	10
IND2 (Unemployed Rights)	3259	178	5.74	3.21	1	10
IND3 (Competition)	3276	161	7.44	2.79	1	10
IND4 (Freedom v State)	3148	289	6.83	3.15	1	10
EG1 (Equalise Incomes)	3315	122	4.06	2.90	1	10
Left Right Scale	3068	369	4.45	2.63	1	10
Political Interest	3412	25	1.98	0.89	1	4
Age	3437	0	45.03	17.57	18	90
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	3427	10	22.91			
AUTH5 (Independence)	3427	10	28.95			
AUTH6 (Imagination)	3427	10	68.72			
(Social Class)				% In Class		
Upper	3181	256	2.07			
Middle	3181	256	25.49			
Lower	3181	256	72.43			
				% Male		
Gender	3437	0	46.99			

1990 Iceland Continuous Variables N= 702						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	696	6	9.14	1.89	1	10
CON2 (Cheating ON Tax).	695	7	8.35	2.59	1	10
CON3 (Joyriding)	697	5	9.19	1.75	1	10
CON4 (taking Soft Drugs).	694	8	9.29	1.91	1	10
CON5 (Keeping money)	692	10	7.93	2.75	1	10
CON6 (Avoid Fare).	696	6	8.07	2.78	1	10
TRAD1 (Homosexuality)	665	37	5.20	3.55	1	10
TRAD2 (Abortion)	695	7	6.08	2.50	1	10
TRAD8 (Divorce)	695	7	4.69	2.42	1	10
TRAD9 (Euthanasia)	674	28	6.02	3.13	1	10
TRAD10 (Suicide)	669	33	8.16	2.89	1	10
IND1 (Responsibility)	690	12	6.17	2.79	1	10
IND2 (Unemployed Rights)	691	11	6.82	2.88	1	10
IND3 (Competition)	687	15	7.92	2.29	1	10
IND4 (Freedom v State)	684	18	6.92	2.42	1	10
EG1 (Equalise Incomes)	695	7	5.23	2.78	1	10
Left Right Scale	648	54	5.14	2.83	1	10
Political Interest	700	2	2.53	0.89	1	4
Age	702	0	39.90	15.87	18	79
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	702	0	67.81			
AUTH5 (Independence)	702	0	11.25			
AUTH6 (Imagination)	702	0	50.57			
(Social Class)				% In Class		
Upper	623	79	12.25			
Middle	623	79	25.65			
Lower	623	79	62.11			
				% Male		
Gender	702	0	50.37			

1990 Ireland Continuous Variables N= 1000						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	995	5	9.01	1.84	1	10
CON2 (Cheating ON Tax).	992	8	8.18	2.46	1	10
CON3 (Joyriding)	997	3	9.89	0.75	1	10
CON4 (taking Soft Drugs).	997	3	9.62	1.26	1	10
CON5 (Keeping money)	997	3	8.82	1.98	1	10
CON6 (Avoid Fare).	997	3	8.73	1.95	1	10
TRAD1 (Homosexuality)	969	31	7.58	3.07	1	10
TRAD2 (Abortion)	998	2	8.62	1.94	1	10
TRAD8 (Divorce)	993	7	6.81	2.78	1	10
TRAD9 (Euthanasia)	979	21	8.23	2.56	1	10
TRAD10 (Suicide)	972	28	8.54	2.47919	1	10
IND1 (Responsibility)	993	7	6.09	2.832716	1	10
IND2 (Unemployed Rights)	995	5	5.68	2.939027	1	10
IND3 (Competition)	987	13	7.20	2.570911	1	10
IND4 (Freedom v State)	990	10	6.84	2.465319	1	10
EG1 (Equalise Incomes)	994	6	4.58	2.845349	1	10
Left Right Scale	898	102	5.34	2.820826	1	10
Political Interest	997	3	2.82	0.974633	1	4
Age	1000	0	44.62	17.44018	18	89
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1000	0	64.81			
AUTH5 (Independence)	1000	0	56.80			
AUTH6 (Imagination)	1000	0	85.60			
(Social Class)				% In Class		
Upper	987	13	12.60			
Middle	987	13	27.30			
Lower	987	13	58.80			
				% Male		
Gender	1000	0	48.00			

1990 Italy Continuous Variables N= 2018						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1989	29	8.78	2.34	1	10
CON2 (Cheating ON Tax).	2001	17	8.39	2.43	1	10
CON3 (Joyriding)	2004	14	9.51	1.44	1	10
CON4 (taking Soft Drugs).	2006	12	9.33	1.85	1	10
CON5 (Keeping money)	1977	41	7.06	3.10	1	10
CON6 (Avoid Fare).	1999	19	8.81	2.17	1	10
TRAD1 (Homosexuality)	1925	93	6.77	3.47	1	10
TRAD2 (Abortion)	1998	20	6.46	2.83	1	10
TRAD8 (Divorce)	1989	29	5.53	3.00	1	10
TRAD9 (Euthanasia)	1898	120	6.75	3.48	1	10
TRAD10 (Suicide)	1951	67	8.46	2.79	1	10
IND1 (Responsibility)	1931	87	5.19	3.17	1	10
IND2 (Unemployed Rights)	1958	60	7.04	3.01	1	10
IND3 (Competition)	1887	131	6.33	3.17	1	10
IND4 (Freedom v State)	1814	204	5.89	3.27	1	10
EG1 (Equalise Incomes)	1933	85	4.83	3.08	1	10
Left Right Scale	1514	504	3.19	3.30	1	10
Political Interest	1939	79	2.78	1.27	1	4
Age	2018	0	41.35	16.09	18	88
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	2017	1	32.01			
AUTH5 (Independence)	2017	1	66.15			
AUTH6 (Imagination)	2017	1	82.85			
(Social Class)	% in Class					
Upper	2000	18	8.97			
Middle	2000	18	52.48			
Lower	2000	18	37.66			
	% Male					
Gender	2018	0	47.82			

1990 Norway Continuous Variables N= 1239						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1229	10	9.47	1.50	1	10
CON2 (Cheating ON Tax).	1225	14	7.79	2.76	1	10
CON3 (Joyriding)	1230	9	9.61	1.48	1	10
CON4 (taking Soft Drugs).	1234	5	9.71	1.24	1	10
CON5 (Keeping money)	1226	13	8.66	2.28	1	10
CON6 (Avoid Fare).	1231	8	9.23	1.88	1	10
TRAD1 (Homosexuality)	1190	49	6.51	3.83	1	10
TRAD2 (Abortion)	1218	21	5.87	2.96	1	10
TRAD8 (Divorce)	1217	22	5.58	2.80	1	10
TRAD9 (Euthanasia)	1186	53	6.39	3.38	1	10
TRAD10 (Suicide)	1159	80	7.73	3.42	1	10
IND1 (Responsibility)	1223	16	6.38	2.66	1	10
IND2 (Unemployed Rights)	1217	22	7.38	2.65	1	10
IND3 (Competition)	1209	30	7.58	2.42	1	10
IND4 (Freedom v State)	1183	56	6.30	2.70	1	10
EG1 (Equalise Incomes)	1223	16	4.89	2.53	1	10
Left Right Scale	1141	98	5.05	2.85	1	10
Political Interest	1234	5	2.19	0.78	1	4
Age	1239	0	44.31	16.35	19	80
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1239	0	31.32			
AUTH5 (Independence)	1239	0	14.04			
AUTH6 (Imagination)	1239	0	68.68			
(Social Class)	% In Class					
Upper	1215	24	18.21			
Middle	1239		33.27			
Lower	1239		48.52			
	% Male					
Gender	1239	0	51.25			

1990 Netherlands Continuous Variables N= 1017						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1014	3	9.36	1.49	1	10
CON2 (Cheating ON Tax).	1009	8	7.97	2.49	1	10
CON3 (Joyriding)	1010	7	9.49	1.38	1	10
CON4 (taking Soft Drugs).	1011	6	8.75	2.28	1	10
CON5 (Keeping money)	1010	7	8.11	2.46	1	10
CON6 (Avoid Fare).	1012	5	8.72	2.08	1	10
TRAD1 (Homosexuality)	995	22	3.57	3.23	1	10
TRAD2 (Abortion)	1008	9	5.61	2.79	1	10
TRAD8 (Divorce)	1008	9	4.75	2.77	1	10
TRAD9 (Euthanasia)	998	19	4.93	2.99	1	10
TRAD10 (Suicide)	986	31	6.34	3.38	1	10
IND1 (Responsibility)	994	23	6.24	2.33	1	10
IND2 (Unemployed Rights)	1002	15	5.94	2.51	1	10
IND3 (Competition)	987	30	6.45	2.36	1	10
IND4 (Freedom v State)	941	76	6.07	2.65	1	10
EG1 (Equalise Incomes)	1008	9	4.86	2.18	1	10
Left Right Scale	930	87	4.86	2.68	1	10
Age	1017	0	43.16	16.49	18	89
Political Interest	1015	2	2.44	0.98	1	4
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1001	16	32.45			
AUTH5 (Independence)	1001	16	49.46			
AUTH6 (Imagination)	1001	16	75.71			
(Social Class)	% in Class					
Upper	967	50	20.55			
Middle	967	50	31.47			
Lower	967	50	43.07			
	% Male					
Gender	1017	0	43.36			

1990 Portugal Continuous Variables N= 1185						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1162	23	8.02	2.97	1	10
CON2 (Cheating ON Tax).	1160	25	7.00	3.36	1	10
CON3 (Joyriding)	1168	17	9.54	1.70	1	10
CON4 (taking Soft Drugs).	1168	17	9.32	1.97	1	10
CON5 (Keeping money)	1169	16	6.60	3.38	1	10
CON6 (Avoid Fare).	1164	21	7.96	2.95	1	10
TRAD1 (Homosexuality)	1151	34	8.53	2.75	1	10
TRAD2 (Abortion)	1169	16	7.05	2.81	1	10
TRAD8 (Divorce)	1166	19	5.86	3.13	1	10
TRAD9 (Euthanasia)	1161	24	7.84	3.07	1	10
TRAD10 (Suicide)	1161	24	8.93	2.31	1	10
IND1 (Responsibility)	1151	34	5.78	3.10	1	10
IND2 (Unemployed Rights)	1153	32	6.26	3.16	1	10
IND3 (Competition)	1115	70	6.23	3.22	1	10
IND4 (Freedom v State)	1094	91	6.14	3.20	1	10
EG1 (Equalise Incomes)	1154	31	6.48	3.06	1	10
Left Right Scale	1076	109	5.14	3.01	1	10
Political Interest	1178	7	3.07	1.00	1	4
Age	1185	0	42.56	17.79	18	90
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1173	12	48.95			
AUTH5 (Independence)	1173	12	78.40			
AUTH6 (Imagination)	1173	12	81.10			
(Social Class)	% In Class					
Upper	1148	37	6.67			
Middle	1148	37	14.18			
Lower	1148	37	79.16			
	% Male					
Gender	1185	0	47.68			

1990 Spain Continuous Variables N= 2637							1990 Sweden Continuous Variables N= 1047						
	Valid	Missing	Mean	SD	Min	Max		Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	2580	57	7.98	3.05	1	10	CON1 (False Benefits)	1039	8	9.29	1.65	1	10
CON2 (Cheating ON Tax).	2596	41	8.08	2.69	1	10	CON2 (Cheating ON Tax).	1037	10	8.44	2.45	1	10
CON3 (Joyriding)	2614	23	9.37	1.58	1	10	CON3 (Joyriding)	1044	3	9.88	0.83	1	10
CON4 (taking Soft Drugs).	2602	35	9.17	1.98	1	10	CON4 (taking Soft Drugs).	1045	2	9.76	1.11	1	10
CON5 (Keeping money)	2587	50	6.63	3.22	1	10	CON5 (Keeping money)	1032	15	8.35	2.46	1	10
CON6 (Avoid Fare).	2615	22	8.44	2.36	1	10	CON6 (Avoid Fare).	1042	5	8.96	2.02	1	10
TRAD1 (Homosexuality)	2539	98	7.09	3.32	1	10	TRAD1 (Homosexuality)	998	49	6.12	3.75	1	10
TRAD2 (Abortion)	2568	69	6.53	3.13	1	10	TRAD2 (Abortion)	1013	34	5.42	2.98	1	10
TRAD8 (Divorce)	2573	64	5.36	3.21	1	10	TRAD8 (Divorce)	1021	26	4.53	2.83	1	10
TRAD9 (Euthanasia)	2440	197	6.39	3.57	1	10	TRAD9 (Euthanasia)	979	68	5.51	3.41	1	10
TRAD10 (Suicide)	2532	105	8.37	2.82	1	10	TRAD10 (Suicide)	971	76	7.02	3.55	1	10
IND1 (Responsibility)	2444	193	4.63	2.98	1	10	IND1 (Responsibility)	1029	18	7.56	2.45	1	10
IND2 (Unemployed Rights)	2501	136	5.99	3.14	1	10	IND2 (Unemployed Rights)	1027	20	6.99	2.81	1	10
IND3 (Competition)	2439	198	6.23	3.09	1	10	IND3 (Competition)	1027	20	7.61	2.31	1	10
IND4 (Freedom v State)	2219	418	4.99	3.34	1	10	IND4 (Freedom v State)	1012	35	6.49	2.53	1	10
EG1 (Equalise Incomes)	2517	120	5.63	2.98	1	10	EG1 (Equalise Incomes)	1033	14	4.47	2.46	1	10
Left Right Scale	1998	639	3.19	3.26	1	10	Left Right Scale	935	112	4.90	3.02	1	10
Political Interest	2605	32	3.08	1.06	1	4	Political Interest	1046	1	2.52	0.81	1	4
Age	2637	0	41.24	16.59	18	93	Age	993	54	40.34	18.18		82
Categorical Variables							Categorical Variables						
	Valid	Missing	% Yes					Valid	Missing	% Yes			
AUTH3 (Obedience)	2636	1	42.02				AUTH3 (Obedience)	1047	0	24.93			
AUTH5 (Independence)	2636	1	62.38				AUTH5 (Independence)	1047	0	63.61			
AUTH6 (Imagination)	2636	1	57.68				AUTH6 (Imagination)	1047	0	59.60			
(Social Class)			% In Class				(Social Class)			% In Class			
Upper	2402	235	9.56				Upper	975	72	14.31			
Middle	2402	235	25.29				Middle	975	72	34.56			
Lower	2402	235	56.24				Lower	975	72	51.13			
			% Male							% Male			
Gender	2637	0	47.29				Gender	1029	18	51.48			

1990 United Kingdom Continuous Variables N= 1484						
	Valid	Missing	Mean	SD	Min	Max
CON1 (False Benefits)	1473	11	9.10	1.80	1	10
CON2 (Cheating ON Tax).	1473	11	8.40	2.35	1	10
CON3 (Joyriding)	1478	6	9.77	0.98	1	10
CON4 (taking Soft Drugs).	1473	11	9.21	1.84	1	10
CON5 (Keeping money)	1476	8	8.40	2.19	1	10
CON6 (Avoid Fare).	1473	11	8.85	1.83	1	10
TRAD1 (Homosexuality)	1433	51	7.28	3.06	1	10
TRAD2 (Abortion)	1468	16	6.55	2.54	1	10
TRAD8 (Divorce)	1461	23	5.71	2.55	1	10
TRAD9 (Euthanasia)	1438	46	6.13	3.05	1	10
TRAD10 (Suicide)	1438	46	7.61	2.73	1	10
IND1 (Responsibility)	1461	23	5.61	2.78	1	10
IND2 (Unemployed Rights)	1451	33	5.37	3.00	1	10
IND3 (Competition)	1454	30	6.90	2.69	1	10
IND4 (Freedom v State)	1418	66	5.86	2.82	1	10
EG1 (Equalise Incomes)	1457	27	4.45	2.57	1	10
Left Right Scale	1344	140	4.75	2.64	1	10
Age	1475	9	46.55	18.76		90
Political Interest	1482	2	2.61	0.97	1	4
Categorical Variables						
	Valid	Missing	% Yes			
AUTH3 (Obedience)	1483	1	41.64			
AUTH5 (Independence)	1483	1	58.76			
AUTH6 (Imagination)	1483	1	82.61			
(Social Class)			% in Class			
Upper	1422	62	19.34			
Middle	1422	62	24.73			
Lower	1422	62	55.93			
			% Male			
Gender	1484	0	46.56			

APPENDIX 9

Details of Sample Sizes, Election Dates and Party Families

Country level sample sizes and nearest election data

Country	N (2008)	N (1990)	Nearest Election 2008	Nearest Election 1990
Aus	1510	1460	2008 (September)	1990 (October)
Bel	1509	2792	2007 (June)	1987 (December)
Den	1507	1030	2007 (November)	1990 (December)
Fin	1134	588	2007 (March)	1987 (March)
Fra	1501	1002	2007 (June)	1988 (June)
Ger	1071	2101	2005 (September)	1990 (December)
Ice	808	702	2007 (May)	1987 (April)
Ire	1013	1000	2007 (May)	1989 (June)
Ita	1519	2018	2008 (April)	1987 (June)
Neth	1554	1017	2006 (November)	1989 (September)
Nor	1090	1239	2009 (September)	1989 (September)
Por	1553	1185	2005 (February)	1987 (July)
Spa	1500	2637	2008 (March)	1989 (October)
Swe	1187	1047	2006 (September)	1989 (September)
UK	1561	1484	2005 (May)	1987 (June)

List of Countries excluded from each party family model at pooled level

Party Family Model	2008	1990
Centre Left	All Included	All Included
Centre Right	All Included	All Included
Centre	(5) Aus, Ire, Ita, Por, Spa	(6) Aus, Fra, Ice, Ire, Ita, Por (9) Bel, Fin, Ger, Ice, Ire, Neth, Por,
Nationalist	(8) Fra, Ger, Ice, Ire, Por, Spa, Swe, UK	Swe, UK (9) Aus, Bel, Fin, Fra, Ger, Ire, Neth,
Communist	(6) Aus, Bel, Den, Ita, Neth, UK	Nor, UK
Green	(7) Den, Ice, Ire, Ita, Nor, Por, Spa	(6) Den, Ice, Ire, Ita, Nor, Por, (5) Den, Fin, Ice,
Chrisitan Democrat	(5) Den, Fin, Fra, Ice, UK	Swe, UK (6) Aus, Ger, Ita,
Conservative	(4) Aus, Ger, Por, Spa	Neth, Por, Spa

APPENDIX 10

Breakdown of party information by country, party name, party type and number of cases

Country	Year	Party	Party Family	n
Austria	1990	Austrian Socialist Party	Centre Left	455
Austria	1990	Austrian People's Party	Centre Right/Christ.Dem	344
Austria	1990	Austrian Freedom Party	Nationalist	161
Austria	1990	Austrian Greens\Die Grünen	Green	90
Austria	2008	Austrian Socialist Party	Centre Left	294
Austria	2008	Austrian People's Party	Centre Right/Christ.Dem	201
Austria	2008	Austrian Freedom Party	Nationalist	110
Austria	2008	Alliance for the Future of Austria	Nationalist	49
Austria	2008	Austrian Greens\Die Grünen	Green	133
Belgium	1990	Socialist Parti	Centre Left	223
Belgium	1990	Parti Socialisti	Centre Left	243
Belgium	1990	PSC	Centre Right/Christ.Dem	181
Belgium	1990	PRL - FDF - MCC	Centre Right/Conserv.	182
Belgium	1990	Christen-Democratisch en Vlaams	Centre Right/Christ.Dem	433
Belgium	1990	VU - ID 21	Centre	85
Belgium	1990	Centre Démocrate Humaniste	Centre	157
Belgium	1990	Agalev	Green	153
Belgium	1990	Ecolo Ecolo	Green	158
Belgium	2008	Socialist Parti	Centre Left	132
Belgium	2008	Parti Socialisti	Centre Left	168
Belgium	2008	Christen-Democratisch en Vlaams	Centre Right/Christ.Dem	196
Belgium	2008	Mouvement Réformateur	Centre Right/Conserv.	118
Belgium	2008	Nieuw-Vlaamse Alliantie	Centre Right/Conserv.	85
Belgium	2008	Centre Démocrate Humaniste	Centre	103
Belgium	2008	Vlaamse Liberalen en Democraten Ope	Centre	99
Belgium	2008	Vlaams Belang	Nationalist	64
Belgium	2008	Ecolo Ecolo	Green	134
Belgium	2008	Groen!	Green	52
Denmark	1990	Social Democrats	Centre Left	277
Denmark	1990	Conservatives	Centre Right/Conserv.	126
Denmark	1990	Liberals	Centre	109
Denmark	1990	Progress Party	Nationalist	52
Denmark	1990	Socialist People`s Party	Communist	143
Denmark	2008	Socialist Peoples Party	Centre Left	252
Denmark	2008	Venstre, Denmarks Liberal Party	Centre Right/Conserv.	377
Denmark	2008	Conservative Peoples Party	Centre Right/Conserv.	104
Denmark	2008	Radical Left Party	Centre	86
Denmark	2008	Danish Peoples Party	Nationalist	109
Finland	1990	Social Democratic Party of Finland	Centre Left	98
Finland	1990	National Coalition Party	Centre Right/Conserv.	115
Finland	1990	Centre Party of Finland	Centre	77
Finland	1990	Green League	Green	42
Finland	2008	Social Democratic Party of Finland	Centre Left	136
Finland	2008	National Coalition Party	Centre Right/Conserv.	196
Finland	2008	Center party	Centre	103
Finland	2008	True Finns	Nationalist	89
Finland	2008	Left Alliance	Communist	40
Finland	2008	Green League	Green	117

/continued

Country	Year	Party	Party Family	n
France	1990	Parti socialiste	Centre Left	250
France	1990	Centre des Democraties Sociaux	Centre Right/Christ.Dem	39
France	1990	Rassemblement Pour la République	Centre Right/Conserv.	58
France	1990	Parti Republicain	Centre Right/Conserv.	72
France	1990	Front National	Nationalist	31
France	1990	Mouvement Ecologique	Green	97
France	2008	Parti socialiste	Centre Left	307
France	2008	Union for a Popular Mouvement	Centre Right/Conserv.	238
France	2008	New Centrist Party	Centre Right/Conserv.	50
France	2008	Movement for France	Centre Right/Conserv.	30
France	2008	Democratic Movement	Centre	109
France	2008	Right Wing Extremist Parties	Nationalist	26
France	2008	Left Wing Extremist Parties	Communist	58
France	2008	Communist Party	Communist	44
France	2008	Other Left Wing Parties	Communist	27
France	2008	Green Party	Green	66
France	2008	Other Environmentalist Parties	Green	35
Germany	1990	German Social-Democratic Party	Centre Left	700
Germany	1990	Christian Democratic Party/Christia	Centre Right/Christ.Dem	697
Germany	1990	German Liberal Party - FDP	Centre	146
Germany	1990	Die Grünen	Green	122
Germany	2008	German Social-Democratic Party	Centre Left	288
Germany	2008	Christian Democratic Party/Christia	Centre Right/Christ.Dem	432
Germany	2008	German Liberal Party - FDP	Centre	115
Germany	2008	The Left/Party of Democratic Social	Communist	239
Germany	2008	The Green Party	Green	131
Iceland	1990	Social Democratic Party	Centre Left	57
Iceland	1990	Progressive Party	Centre Right/Conserv.	85
Iceland	1990	Independence Party	Centre Right/Conserv.	229
Iceland	1990	People's Alliance	Communist	43
Iceland	2008	Social Democratic Party	Centre Left	131
Iceland	2008	Independence Party	Centre Right/Conserv.	164
Iceland	2008	Progressive Party	Centre	71
Iceland	2008	Left-Green Movement	Communist	118
Ireland	1990	Labour	Centre Left	72
Ireland	1990	Fine Gael	Centre Right/Christ.Dem	200
Ireland	1990	Fianna Fail	Centre Right/Conserv.	446
Ireland	1990	Progressive Democrats	Centre	33
Ireland	1990	Workers Party	Communist	33
Ireland	1990	Green Party	Green	34
Ireland	2008	Labour	Centre Left	58
Ireland	2008	Fianna Fail	Centre Right/Conserv.	279
Ireland	2008	Fine Gael	Centre Right/Christ.Dem	148
Ireland	2008	Sinn Fein	Communist	49
Ireland	2008	Green Party	Green	33
Italy	1990	Partito Socialista Italiano	Centre Left	151
Italy	1990	Democrazia Cristiana	Centre Right/Christ.Dem	451
Italy	1990	Liste regionaliste	Nationalist	75
Italy	1990	Partito Comunista Italiano	Communist	218
Italy	1990	Liste Verdi	Green	165
Italy	2008	Partito Democratico	Centre Left	272
Italy	2008	Il Popolo della Libertà	Centre Right/Conserv.	210
Italy	2008	Unione di Centro (UDC-Rosa Bianca)	Centre Right/Christ.Dem	69
Italy	2008	Italia dei Valori - Lista Di Pietro	Centre	69
Italy	2008	Lega Nord (Bossi)	Nationalist	63
Italy	2008	Rifondazione e Comunisti Italiani	Communist	38

/continued

Country	Year	Party	Party Family	n
Netherlands	1990	Socialist Party	Centre Left	218
Netherlands	1990	Christian Democratic Party - CDA	Centre Right/Christ.Dem	289
Netherlands	1990	Christian Union (ChristenUnie)	Centre	94
Netherlands	1990	D66	Centre	164
Netherlands	1990	Green/Left (GroenLinks)	Green	70
Netherlands	2008	Socialist Party	Centre Left	136
Netherlands	2008	Christian Democratic Party - CDA	Centre Right/Christ.Dem	305
Netherlands	2008	Liberals - VVD	Centre Right/Conserv.	178
Netherlands	2008	Group Verdonk\Proud of the Netherla	Centre Right/Christ.Dem	92
Netherlands	2008	Christian Union (ChristenUnie)	Centre	61
Netherlands	2008	Party for Freedom	Nationalist	37
Netherlands	2008	Green/Left (GroenLinks)	Green	73
Norway	1990	Socialist Party	Centre Left	130
Norway	1990	Labour Party	Centre Left	343
Norway	1990	Christian Party	Centre Right/Christ.Dem	78
Norway	1990	Conservative Party	Centre Right/Conserv.	197
Norway	1990	Liberal Party	Centre	35
Norway	1990	Center Party	Centre	60
Norway	1990	Progressive Party	Nationalist	128
Norway	2008	Socialist Party	Centre Left	59
Norway	2008	Labour Party	Centre Left	198
Norway	2008	Conservative Party	Centre Right/Conserv.	172
Norway	2008	Christian Democratic Party	Centre Right/Christ.Dem	49
Norway	2008	Centre Party	Centre	72
Norway	2008	Liberal Party	Centre	57
Norway	2008	Progress Party	Nationalist	192
Norway	2008	Socialist Left Party	Communist	62
Portugal	1990	Socialist Party	Centre Left	279
Portugal	1990	Social Democratic Party - PPD/PSD	Centre Right/Christ.Dem	321
Portugal	1990	Portuguese Communist Party - CDU/PC	Communist	56
Portugal	2008	Socialist Party	Centre Left	248
Portugal	2008	Social Democratic Party - PPD/PSD	Centre Right/Christ.Dem	206
Portugal	2008	Portuguese Communist Party - CDU/PC	Communist	58
Spain	1990	Partido Socialista Obrero Español	Centre Left	573
Spain	1990	Partido Popular	Centre Right/Christ.Dem	447
Spain	1990	Centro Democratico y Social	Centre	106
Spain	1990	Convergencia i Unió	Nationalist	82
Spain	1990	Izquierda Unida	Communist	168
Spain	1990	VerdES: -green	Green	57
Spain	2008	Partido Socialista Obrero Español	Centre Left	399
Spain	2008	Partido Popular	Centre Right/Christ.Dem	282
Spain	2008	Izquierda Unida	Communist	58
Sweden	1990	Socialdemokraterna	Centre Left	242
Sweden	1990	Moderata samlingspartiet	Centre Right/Conserv.	205
Sweden	1990	Centerpartiet	Centre	74
Sweden	1990	Folkpartiet	Centre	159
Sweden	1990	Vänsterpartiet	Communist	57
Sweden	1990	Miljöpartiet	Green	79
Sweden	2008	Social democratic party	Centre Left	264
Sweden	2008	Moderate party	Centre Right/Conserv.	245
Sweden	2008	Liberal party	Centre Right/Conserv.	80
Sweden	2008	Christian Democratic party	Centre Right/Christ.Dem	34
Sweden	2008	Center party	Centre	39
Sweden	2008	Left wing party	Communist	67
Sweden	2008	Green party	Green	79
United Kingdom	1990	Labour	Centre Left	571
United Kingdom	1990	Conservative	Centre Right/Conserv.	444
United Kingdom	1990	Liberal Democrat	Centre	68
United Kingdom	1990	Green Party	Green	54
United Kingdom	2008	Labour	Centre Left	260
United Kingdom	2008	Conservative	Centre Right/Conserv.	368
United Kingdom	2008	Liberal Democrat	Centre	138
United Kingdom	2008	Green	Green	53

APPENDIX 11

1990 Multinomial Models

Multinomial Party Family Choice Models with Centre Left Party as the Base Category

<i>n</i> = 19202		Model 1 Party Family v Centre left 1990 (Values Only)					AIC	BIC	DF
Values	Christian Democrat	Conservative	Centre	Nationalist	Communist	Green			
Individualism	0.547 (0.029)	0.772 (0.030)	0.727 (0.044)	0.955 (0.026)	-0.614 (0.049)	0.147 (0.073)	922678.83	923182.788	66
Conformity	0.267 (0.046)	0.133 (0.059)	-0.092 (0.052)	-0.108 (0.101)	0.131 (0.068)	-0.388 (0.070)			
Traditionalism	0.885 (0.029)	0.168 (0.049)	-0.103 (0.053)	0.201 (0.099)	-0.822 (0.051)	-0.721 (0.060)			
Egalitarianism	-0.276 (0.024)	-0.544 (0.032)	-0.570 (0.043)	-0.313 (0.065)	0.277 (0.050)	-0.147 (0.053)			
Authoritarianism	0.431 (0.040)	0.210 (0.044)	-0.060 (0.053)	-0.105 (0.073)	-0.517 (0.068)	-0.479 (0.066)			
		Model 2 Party Family v Centre left 1990 (Values and Left-Right)					AIC	BIC	DF
Values	Christian Democrat	Conservative	Centre	Nationalist	Communist	Green			
Individualism	0.261 (0.024)	0.292 (0.025)	0.339 (0.036)	0.468 (0.049)	-0.228 (0.051)	0.143 (0.075)	771271.867	771805.01	72
Conformity	-0.211 (0.031)	-0.041 (0.033)	-0.069 (0.046)	-0.213 (0.060)	-0.022 (0.056)	-0.593 (0.069)			
Traditionalism	0.482 (0.028)	0.059 (0.028)	-0.099 (0.054)	0.143 (0.078)	-0.320 (0.057)	-0.464 (0.077)			
Egalitarianism	-0.031 (0.006)	-0.163 (0.006)	-0.083 (0.009)	-0.039 (0.013)	0.130 (0.014)	-0.056 (0.019)			
Authoritarianism	0.300 (0.043)	0.076 (0.049)	-0.081 (0.056)	-0.121 (0.079)	-0.396 (0.064)	-0.217 (0.069)			
Left-Right	0.427 (0.007)	0.446 (0.005)	0.414 (0.008)	0.423 (0.013)	-0.448 (0.011)	0.143 (0.029)			

Multinomial Party Family Choice Models with Centre Party as the Base Category

<i>n</i> = 14935		Model 1 Party Family v Centre 1990 (Values Only)					AIC	BIC	DF
Values	Centre Left	Christian Democrat	Conservative	Nationalist	Communist	Green			
Indiv	-0.603 (0.047)	0.029 (0.050)	0.213 (0.055)	0.278 (0.087)	-0.906 (0.069)	-0.412 (0.062)	902004.795	902500.755	66
Conform	0.074 (0.059)	0.078 (0.066)	0.007 (0.070)	-0.121 (0.095)	0.001 (0.077)	-0.367 (0.066)			
Tradit	0.073 (0.057)	0.901 (0.065)	0.231 (0.064)	0.431 (0.095)	-0.436 (0.081)	-0.222 (0.071)			
Egalit	0.154 (0.011)	0.020 (0.012)	-0.021 (0.013)	0.034 (0.019)	0.224 (0.017)	0.105 (0.015)			
Auth	0.098 (0.053)	0.537 (0.055)	0.098 (0.059)	0.002 (0.083)	-0.411 (0.078)	-0.372 (0.075)			
		Model 2 Party Family v Centre 1990 (Values and Left-Right)					AIC	BIC	DF
Values	Centre Left	Christian Democrat	Conservative	Nationalist	Communist	Green			
Indiv	-0.450 (0.049)	-0.010 (0.051)	0.183 (0.054)	0.160 (0.090)	-0.704 (0.070)	-0.269 (0.066)	771271.866	771805.009	72
Conform	0.092 (0.062)	-0.72 (0.068)	0.012 (0.072)	-0.097 (0.101)	0.067 (0.079)	-0.347 (0.069)			
Tradit	0.055 (0.060)	0.875 (0.066)	0.98 (0.065)	0.185 (0.102)	-0.125 (0.083)	-0.112 (0.074)			
Egalit	0.111 (0.013)	0.017 (0.013)	-0.014 (0.014)	0.030 (0.017)	0.051 (0.021)	0.069 (0.017)			
Auth	0.091 (0.056)	0.494 (0.057)	0.071 (0.063)	-0.023 (0.088)	0.202 (0.079)	-0.284 (0.078)			
LR	-0.550 (0.021)	0.170 (0.019)	0.326 (0.020)	0.092 (0.033)	0.956 (0.037)	-0.444 (0.026)			

APPENDIX 12

National Level Results 2008

Austria

Total, direct and indirect effects	Cleft	CRight	Nat	Green	CD
	<i>294</i>	<i>201</i>	<i>159</i>	<i>133</i>	<i>201</i>
Total effect of TRADIT	-0.439	0.195	0.247	-0.076	0.195
Total Indirect effect via L/R	-0.094	0.105	0.194	-0.175	0.105
Direct effect of Tradit	-0.345	0.091	0.054	0.099	0.091
Total effect of INDIV	-0.47	0.242	0.377	-0.125	0.242
Total Indirect effect via L/R	-0.073	0.083	0.151	-0.135	0.083
Direct effect of Indiv	-0.396	0.159	0.226	0.011	0.159
Total effect of AUTH	0.564	0.077	-0.245	-0.491	0.077
Total Indirect effect via L/R	0.004	-0.002	-0.008	0.008	-0.002
Direct effect of AUTH	0.56	0.079	-0.237	-0.499	0.079
Total effect of CONFORM	0.245	0.156	-0.011	-0.191	0.156
Total Indirect effect via L/R	0.057	-0.063	-0.118	0.106	-0.063
Direct effect of Conform	0.188	0.219	0.107	-0.297	0.219
Total effect of EGA	-0.046	-0.092	0.036	0.145	-0.092
Total Indirect effect via L/R	0.032	-0.036	-0.065	0.059	-0.036
Direct effect of EGA	-0.077	-0.056	0.101	0.086	-0.056
Direct effect of L/R	-0.201	0.228	0.412	-0.369	0.228
RMSEA/CFI	0.057/0.868	0.059/0.858	0.058/0.86	0.056/0.871	0.059/0.858
Rsquared	0.387	0.255	0.316	0.54	0.255

Direct Values on LR

Traditionalism	0.468	0.468	0.468	0.468	0.468
Individualism	0.364	0.364	0.364	0.364	0.364
Authoritarianism	-0.021	-0.021	-0.021	-0.021	-0.021
Conformity	-0.283	-0.283	-0.283	-0.283	-0.283
Egalitarianism	-0.077	-0.077	-0.077	-0.077	-0.077

Belgium							
Total, direct and indirect effects	Cleft	CRight	Centre	Nat	Green	CD	Cons
	300	399	202	63	186	196	203
Total effect of TRADIT	0.007	0.093	0.128	0.095	-0.268	0.206	-0.067
Total Indirect effect via L/R	-0.035	0.029	0.004	0.027	-0.017	0.015	0.028
Direct effect of Tradit	0.042	0.064	0.124	0.067	-0.251	0.19	-0.095
Total effect of INDIV	-0.207	0.071	0.324	-0.28	0.026	-0.159	0.246
Total Indirect effect via L/R	-0.063	0.052	0.007	0.05	-0.03	0.028	0.052
Direct effect of Indiv	-0.144	0.019	0.317	-0.33	0.056	-0.186	0.194
Total effect of AUTH	0.027	-0.052	-0.037	0.126	-0.232	0.074	-0.154
Total Indirect effect via L/R	-0.008	0.007	0.001	0.007	-0.005	0.004	0.007
Direct effect of AUTH	0.035	-0.059	-0.038	0.119	-0.227	0.07	-0.162
Total effect of CONFORM	0.053	0.033	0.002	-0.179	0.088	-0.047	0.103
Total Indirect effect via L/R	0.013	-0.01	-0.001	-0.01	0.005	-0.005	-0.01
Direct effect of Conform	0.04	0.042	0.003	-0.169	0.082	-0.042	0.113
Total effect of EGA	0.232	-0.15	-0.146	-0.124	0.057	-0.032	-0.192
Total Indirect effect via L/R	0.093	-0.08	-0.01	-0.074	0.047	-0.043	-0.077
Direct effect of EGA	0.139	-0.071	-0.136	-0.051	0.01	0.011	-0.114
Direct effect of L/R	-0.403	0.344	0.042	0.318	-0.202	0.184	0.334
RMSEA/CFI	0.055/0.834	0.055/0.823	0.054/0.824	0.055/0.813	0.056/0.814	0.058/0.799	0.054/0.826
Rsquared	0.251	0.145	0.141	0.221	0.207	0.111	0.231

Direct Values on LR

Traditionalism	0.086	0.086	0.086	0.086	0.086	0.086	0.086
Individualism	0.156	0.156	0.156	0.156	0.156	0.156	0.156
Authoritarianism	0.021	0.021	0.021	0.021	0.021	0.021	0.021
Conformity	-0.031	-0.031	-0.031	-0.031	-0.031	-0.031	-0.031
Egalitarianism	0.139	0.139	0.139	0.139	0.139	0.139	0.139

Denmark

Total, direct and indirect effects	Cleft	CRight	Centre	Nat	Cons
	533	481	86	109	481
Total effect of TRADIT	-0.201	0.11	-0.201	0.291	0.11
Total Indirect effect via L/R	-0.027	0.021	0.006	0.017	0.021
Direct effect of Tradit	-0.173	0.09	-0.207	0.274	0.09
Total effect of INDIV	-0.528	0.535	0.093	0.088	0.535
Total Indirect effect via L/R	-0.111	0.084	0.024	0.069	0.084
Direct effect of Indiv	-0.417	0.451	0.069	0.019	0.451
Total effect of AUTH	-0.027	0.031	-0.223	0.25	0.031
Total Indirect effect via L/R	-0.043	0.033	0.009	0.027	0.033
Direct effect of AUTH	0.016	-0.002	-0.232	0.223	-0.002
Total effect of CONFORM	0.074	0.06	-0.047	-0.181	0.06
Total Indirect effect via L/R	-0.012	0.009	0.003	0.008	0.009
Direct effect of Conform	0.086	0.051	-0.05	-0.189	0.051
Total effect of EGA	0.412	-0.477	0.052	-0.098	-0.477
Total Indirect effect via L/R	0.111	-0.084	-0.024	-0.07	-0.084
Direct effect of EGA	0.301	-0.393	0.076	-0.028	-0.393
Direct effect of L/R	-0.285	0.216	0.061	0.179	0.216
RMSEA/CFI	0.076/0.796	0.076/0.8	0.075/0.766	0.077/0.752	0.076/0.8
Rsquared	0.534	0.575	0.157	0.22	0.575

Direct Values on LR

Traditionalism	0.095	0.095	0.095	0.095	0.095
Individualism	0.387	0.387	0.387	0.387	0.387
Authoritarianism	0.152	0.152	0.152	0.152	0.152
Conformity	0.044	0.044	0.044	0.044	0.044
Egalitarianism	-0.393	-0.393	-0.393	-0.393	-0.393

Finland							
Total, direct and indirect effects	Cleft	CRight	Centre	Nat	Comm	Green	Cons
	<i>136</i>	<i>196</i>	<i>103</i>	<i>89</i>	<i>40</i>	<i>117</i>	<i>196</i>
Total effect of TRADIT	-0.239	-0.24	0.392	0.304	-0.193	-0.274	-0.24
Total Indirect effect via L/R	-0.1	0.096	0.048	0.009	-0.117	-0.021	0.096
Direct effect of Tradit	-0.138	-0.336	0.343	0.295	-0.076	-0.253	-0.336
Total effect of INDIV	-0.332	0.578	0.1	-0.165	-0.298	-0.126	0.578
Total Indirect effect via L/R	-0.275	0.265	0.135	0.023	-0.321	-0.054	0.265
Direct effect of Indiv	-0.058	0.313	-0.036	-0.188	0.024	-0.072	0.313
Total effect of AUTH	0.171	0.171	-0.053	0.067	0.049	-0.267	0.171
Total Indirect effect via L/R	-0.017	0.017	0.009	0.001	-0.02	-0.002	0.017
Direct effect of AUTH	0.188	0.154	-0.062	0.066	0.069	-0.264	0.154
Total effect of CONFORM	0.263	0.198	0.035	-0.314	-0.077	-0.115	0.198
Total Indirect effect via L/R	-0.039	0.038	0.02	0.003	-0.045	-0.007	0.038
Direct effect of Conform	0.302	0.159	0.015	-0.317	-0.031	-0.108	0.159
Total effect of EGA	0.291	-0.486	-0.039	0.148	0.551	0.077	-0.486
Total Indirect effect via L/R	0.265	-0.256	-0.131	-0.023	0.31	0.053	-0.256
Direct effect of EGA	0.025	-0.229	0.092	0.171	0.241	0.024	-0.229
Direct effect of L/R	-0.608	0.587	0.3	0.052	-0.71	-0.121	0.587
RMSEA/CFI	0.081/0.776	0.080/0.804	0.081/0.762	0.082/0.756	0.081/0.769	0.081/0.769	0.080/0.804
Rsquared	0.487	0.799	0.21	0.163	0.721	0.304	0.799

Direct Values on LR

Traditionalism	0.163	0.163	0.163	0.163	0.163	0.163	0.163
Individualism	0.452	0.452	0.452	0.452	0.452	0.452	0.452
Authoritarianism	0.029	0.029	0.029	0.029	0.029	0.029	0.029
Conformity	0.065	0.065	0.065	0.065	0.065	0.065	0.065
Egalitarianism	-0.437	-0.437	-0.437	-0.437	-0.437	-0.437	-0.437

France

Total, direct and indirect effects	Cleft	CRight	Centre	Comm	Green	Cons
	<i>307</i>	<i>318</i>	<i>109</i>	<i>129</i>	<i>101</i>	<i>318</i>
Total effect of TRADIT	-0.175	0.12	-0.143	0.126	-0.105	0.12
Total Indirect effect via L/R	-0.074	0.068	0.017	-0.061	-0.008	0.068
Direct effect of Tradit	-0.101	0.052	-0.16	0.187	-0.098	0.052
Total effect of INDIV	-0.295	0.529	0.091	-0.328	-0.132	0.529
Total Indirect effect via L/R	-0.2	0.181	0.047	-0.163	-0.02	0.181
Direct effect of Indiv	-0.096	0.348	0.044	-0.164	-0.112	0.348
Total effect of AUTH	0.022	0.108	-0.038	-0.198	-0.152	0.108
Total Indirect effect via L/R	-0.073	0.066	0.017	-0.059	-0.007	0.066
Direct effect of AUTH	0.096	0.042	-0.055	-0.139	-0.145	0.042
Total effect of CONFORM	0.128	0.103	-0.03	-0.215	0.02	0.103
Total Indirect effect via L/R	-0.014	0.013	0.003	-0.012	-0.001	0.013
Direct effect of Conform	0.143	0.09	-0.034	-0.203	0.022	0.09
Total effect of EGA	0.211	-0.275	-0.099	0.241	0.09	-0.275
Total Indirect effect via L/R	0.155	-0.141	-0.036	0.127	0.016	-0.141
Direct effect of EGA	0.056	-0.134	-0.062	0.114	0.074	-0.134
Direct effect of L/R	-0.526	0.477	0.123	-0.429	-0.053	0.477
RMSEA/CFI	0.039/0.936	0.040/0.94	0.040/0.928	0.040/0.933	0.039/0.93	0.040/0.94
Rsquared	0.347	0.589	0.06	0.386	0.072	0.589

Direct Values on LR

Traditionalism	0.141	0.141	0.141	0.141	0.141	0.141
Individualism	0.38	0.38	0.38	0.38	0.38	0.38
Authoritarianism	0.139	0.139	0.139	0.139	0.139	0.139
Conformity	0.027	0.027	0.027	0.027	0.027	0.027
Egalitarianism	0.056	0.056	0.056	0.056	0.056	0.056

Germany						
Total, direct and indirect effects	Cleft	CRight	Centre	Comm	Green	CD
	183	279	70	54	76	279
Total effect of TRADIT	-0.192	0.22	0.223	-0.145	-0.148	0.22
Total Indirect effect via L/R	-0.034	0.08	0.04	-0.107	-0.04	0.08
Direct effect of Tradit	-0.159	0.14	0.182	-0.038	-0.108	0.14
Total effect of INDIV	0.031	0.301	0.308	-0.49	-0.051	0.301
Total Indirect effect via L/R	-0.041	0.098	0.049	-0.127	-0.049	0.098
Direct effect of Indiv	0.072	0.203	0.259	-0.363	-0.002	0.203
Total effect of AUTH	0.046	0.226	-0.364	-0.183	-0.033	0.226
Total Indirect effect via L/R	-0.01	0.025	0.013	-0.03	-0.013	0.025
Direct effect of AUTH	0.057	0.201	-0.377	-0.153	-0.019	0.201
Total effect of CONFORM	0.064	0.071	-0.145	0.136	-0.104	0.071
Total Indirect effect via L/R	0.017	-0.04	-0.02	0.053	0.021	-0.04
Direct effect of Conform	0.047	0.111	-0.125	0.083	-0.125	0.111
Total effect of EGA	0.001	-0.145	-0.117	0.232	0.005	-0.145
Total Indirect effect via L/R	0.011	-0.026	-0.013	0.035	0.013	-0.026
Direct effect of EGA	-0.01	-0.119	-0.104	0.198	-0.009	-0.119
Direct effect of L/R	-0.15	0.358	0.181	-0.467	-0.181	0.358
RMSEA/CFI	0.058/0.843	0.058/0.859	0.058/0.848	0.866/0/059	0.843/0.059	0.058/0.859
Rsquared	0.045	0.39	0.258	0.572	0.083	0.39

Direct Values on LR

Traditionalism	0.224	0.224	0.224	0.224	0.224	0.224
Individualism	0.273	0.273	0.273	0.273	0.273	0.273
Authoritarianism	0.07	0.07	0.07	0.07	0.07	0.07
Conformity	-0.112	-0.112	-0.112	-0.112	-0.112	-0.112
Egalitarianism	-0.119	-0.119	-0.119	-0.119	-0.119	-0.119

Iceland

Total, direct and indirect effects	Cleft	CRight	Centre	Comm	Cons
	131	164	71	118	164
Total effect of TRADIT	-0.105	0.025	0.04	-0.147	0.025
Total Indirect effect via L/R	-0.065	0.063	0.006	-0.05	0.063
Direct effect of Tradit	-0.04	-0.038	0.034	-0.096	-0.038
Total effect of INDIV	-0.326	0.653	0.168	-0.515	0.653
Total Indirect effect via L/R	-0.18	0.25	0.023	-0.203	0.25
Direct effect of Indiv	-0.146	0.403	0.145	-0.311	0.403
Total effect of AUTH	0.122	0.239	0.187	-0.275	0.239
Total Indirect effect via L/R	-0.019	0.076	0.007	-0.062	0.076
Direct effect of AUTH	0.141	0.163	0.18	-0.213	0.163
Total effect of CONFORM	0.026	0.07	-0.149	0.241	0.07
Total Indirect effect via L/R	0.017	-0.04	-0.003	0.031	-0.04
Direct effect of Conform	0.008	0.111	-0.146	0.21	0.111
Total effect of EGA	0.099	-0.305	-0.113	0.299	-0.305
Total Indirect effect via L/R	0.167	-0.228	-0.021	0.185	-0.228
Direct effect of EGA	-0.067	-0.078	-0.091	0.114	-0.078
Direct effect of L/R	-0.423	0.578	0.054	-0.47	0.578
RMSEA/CFI	0.038/0.921	0.042/0.929	0.042/0.9	0.042/0.91	0.042/0.929
Rsquared	0.245	0.837	0.071	0.558	0.837

Direct Values on LR

Traditionalism	0.153	0.153	0.153	0.153	0.153
Individualism	0.425	0.425	0.425	0.425	0.425
Authoritarianism	0.046	0.046	0.046	0.046	0.046
Conformity	-0.041	-0.041	-0.041	-0.041	-0.041
Egalitarianism	-0.067	-0.067	-0.067	-0.067	-0.067

Ireland					
Total, direct and indirect effects	Ireland Cleft 58	Ireland CRight 427	Ireland Comm 49	Ireland CD 148	Ireland Cons 279
Total effect of TRADIT	-0.16	-0.017	0.316	0.009	-0.029
Total Indirect effect via L/R	-0.007	0.031	-0.024	0.007	0.021
Direct effect of Tradit	-0.153	-0.048	0.34	0.002	-0.05
Total effect of INDIV	-0.08	0.013	0.016	0.04	-0.021
Total Indirect effect via L/R	-0.003	0.012	-0.009	0.003	0.008
Direct effect of Indiv	-0.077	0.001	0.026	0.037	-0.029
Total effect of AUTH	-0.136	0.144	-0.15	0.036	0.107
Total Indirect effect via L/R	0.002	-0.003	0.003	-0.001	-0.002
Direct effect of AUTH	-0.138	0.148	-0.153	0.037	0.109
Total effect of CONFORM	0.045	0.344	-0.707	0.064	0.298
Total Indirect effect via L/R	-0.006	0.028	-0.019	0.006	0.019
Direct effect of Conform	0.051	0.316	-0.688	0.058	0.28
Total effect of EGA	-0.007	-0.012	0.111	-0.017	0.001
Total Indirect effect via L/R	-0.001	0.003	-0.002	0.001	0.002
Direct effect of EGA	-0.007	-0.015	0.113	-0.017	0.001
Direct effect of L/R	-0.043	0.198	-0.149	0.047	0.135
RMSEA/CFI	0.063/0.792	0.062/0.799	0.063/0.796	0.062/0.792	0.061/0.802
Rsquared	0.056	0.169	0.355	0.011	0.104
Direct Values on LR					
Traditionalism	0.168	0.168	0.168	0.168	0.168
Individualism	0.062	0.062	0.062	0.062	0.062
Authoritarianism	-0.04	-0.04	-0.04	-0.04	-0.04
Conformity	0.135	0.135	0.135	0.135	0.135
Egalitarianism	0.015	0.015	0.015	0.015	0.015
Italy					
Total, direct and indirect effects	Cleft 272	CRight 279	Nat 63	CD 69	Cons 210
Total effect of TRADIT	-0.148	0.304	-0.004	0.501	0.125
Total Indirect effect via L/R	-0.096	0.082	0.075	-0.002	0.098
Direct effect of Tradit	-0.052	0.222	-0.08	0.502	0.027
Total effect of INDIV	-0.163	0.427	0.152	0.209	0.385
Total Indirect effect via L/R	-0.168	0.147	0.132	-0.004	0.173
Direct effect of Indiv	0.005	0.28	0.02	0.213	0.212
Total effect of AUTH	-0.192	0.105	0.329	-0.063	0.131
Total Indirect effect via L/R	-0.128	0.113	0.101	-0.003	0.131
Direct effect of AUTH	-0.064	-0.008	0.228	-0.061	0.001
Total effect of CONFORM	0.161	0.042	-0.175	0.014	0.053
Total Indirect effect via L/R	0.02	-0.017	-0.017	0.001	-0.02
Direct effect of Conform	0.141	0.058	-0.158	0.014	0.073
Total effect of EGA	0.151	-0.218	-0.04	-0.015	-0.242
Total Indirect effect via L/R	0.145	-0.126	-0.114	0.003	-0.149
Direct effect of EGA	0.005	-0.091	0.074	-0.018	-0.092
Direct effect of L/R	-0.577	0.503	0.454	-0.012	0.594
RMSEA/CFI	0.039/0.92	0.041/0.923	0.039/0.915	0.039/0.918	0.040/0.922
Rsquared	0.358	0.574	0.262	0.273	0.539
Direct Values on LR					
Traditionalism	0.163	0.163	0.163	0.163	0.163
Individualism	0.292	0.292	0.292	0.292	0.292
Authoritarianism	0.224	0.224	0.224	0.224	0.224
Conformity	-0.033	-0.033	-0.033	-0.033	-0.033
Egalitarianism	-0.251	-0.251	-0.251	-0.251	-0.251

Netherlands

Total, direct and indirect effects	Cleft	CRight	Centre	Nat	Green	CD	Cons
	428	575	61	37	73	397	178
Total effect of TRADIT	-0.167	-0.167	0.314	0.202	-0.101	-0.002	-0.367
Total Indirect effect via L/R	-0.088	0.082	0.001	0.055	-0.057	0.058	0.07
Direct effect of Tradit	-0.079	-0.25	0.313	0.147	-0.045	-0.061	-0.437
Total effect of INDIV	-0.195	0.345	-0.128	0.082	-0.249	0.113	0.401
Total Indirect effect via L/R	-0.094	0.089	0.001	0.058	-0.061	0.063	0.074
Direct effect of Indiv	-0.101	0.256	-0.129	0.023	-0.188	0.05	0.327
Total effect of AUTH	-0.133	0.258	-0.089	0.085	-0.38	0.268	0.04
Total Indirect effect via L/R	-0.08	0.075	0.001	0.05	-0.053	0.053	0.064
Direct effect of AUTH	-0.053	0.184	-0.09	0.035	-0.327	0.215	-0.023
Total effect of CONFORM	-0.047	0.233	0.553	-0.294	-0.114	0.224	0.153
Total Indirect effect via L/R	-0.031	0.029	0.001	0.019	-0.02	0.021	0.024
Direct effect of Conform	-0.016	0.204	0.553	-0.313	-0.094	0.204	0.129
Total effect of EGA	0.247	-0.318	0.005	-0.013	0.252	-0.116	-0.425
Total Indirect effect via L/R	0.123	-0.116	-0.002	-0.077	0.08	-0.082	-0.098
Direct effect of EGA	0.124	-0.202	0.006	0.064	0.172	-0.033	-0.327
Direct effect of L/R	-0.505	0.473	0.006	0.315	-0.328	0.337	0.4
RMSEA/CFI	0.039/0.949	0.041/0.944	0.041/0.941	0.039/0.944	0.039/0.945	0.042/0.938	0.380/0.949
Rsquared	0.389	0.492	0.577	0.147	0.472	0.287	0.54

Direct Values on LR

Traditionalism	0.174	0.174	0.174	0.174	0.174	0.174	0.174
Individualism	0.186	0.186	0.186	0.186	0.186	0.186	0.186
Authoritarianism	0.159	0.159	0.159	0.159	0.159	0.159	0.159
Conformity	0.061	0.061	0.061	0.061	0.061	0.061	0.061
Egalitarianism	0.124	0.124	0.124	0.124	0.124	0.124	0.124

Norway

Total, direct and indirect effects	Cleft	CRight	Centre	Nat	Comm	CD	Cons
	257	221	129	192	62	49	172
Total effect of TRADIT	-0.139	0.049	0.036	0.262	-0.327	0.384	-0.218
Total Indirect effect via L/R	-0.052	0.064	-0.011	0.034	-0.078	0.012	0.071
Direct effect of Tradit	-0.087	-0.015	0.047	0.228	-0.249	0.372	-0.288
Total effect of INDIV	-0.274	0.382	-0.164	0.36	-0.444	-0.014	0.44
Total Indirect effect via L/R	-0.141	0.175	-0.03	0.09	-0.215	0.034	0.193
Direct effect of Indiv	-0.134	0.175	-0.134	0.27	-0.23	-0.048	0.247
Total effect of AUTH	-0.056	-0.066	0.022	0.196	-0.24	-0.156	0.018
Total Indirect effect via L/R	-0.017	0.021	-0.004	0.01	-0.026	0.004	0.023
Direct effect of AUTH	-0.039	-0.087	0.026	0.186	-0.213	-0.161	-0.005
Total effect of CONFORM	0.173	0.083	0.095	-0.293	0.079	0.498	0.031
Total Indirect effect via L/R	-0.02	0.026	-0.004	0.012	-0.032	0.004	0.028
Direct effect of Conform	0.193	0.057	0.1	-0.305	0.111	0.493	0.003
Total effect of EGA	0.201	-0.224	0.083	-0.246	0.251	0.163	-0.326
Total Indirect effect via L/R	0.132	-0.165	0.028	-0.085	0.202	-0.031	-0.182
Direct effect of EGA	0.068	-0.059	0.054	-0.161	0.049	0.195	-0.144
Direct effect of L/R	-0.346	0.434	-0.074	0.222	-0.53	0.083	0.477
RMSEA/CFI	0.079/0.774	0.077/0.791	0.078/0.77	0.081/0.766	0.078/0.788	0.079/0.78	0.077/0.796
Rsquared	0.217	0.334	0.05	0.347	0.647	0.537	0.487

Direct Values on LR

Traditionalism	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Individualism	0.406	0.406	0.406	0.406	0.406	0.406	0.406
Authoritarianism	0.048	0.048	0.048	0.048	0.048	0.048	0.048
Conformity	0.057	0.057	0.057	0.057	0.057	0.057	0.057
Egalitarianism	-0.382	-0.382	-0.382	-0.382	-0.382	-0.382	-0.382

Portugal	Portugal	Portugal	Portugal	Portugal
Total, direct and indirect effects	Cleft	CRight	Comm	CD
	248	206	58	206
Total effect of TRADIT	0.102	0.144	-0.309	0.144
Total Indirect effect via L/R	-0.026	0.054	-0.041	0.054
Direct effect of Tradit	0.128	0.09	-0.268	0.09
Total effect of INDIV	-0.071	0.015	-0.124	0.015
Total Indirect effect via L/R	-0.045	0.093	-0.071	0.093
Direct effect of Indiv	-0.026	-0.078	-0.053	-0.078
Total effect of AUTH	0.124	-0.007	-0.217	-0.007
Total Indirect effect via L/R	-0.026	0.053	-0.04	0.053
Direct effect of AUTH	0.15	-0.06	-0.177	-0.06
Total effect of CONFORM	-0.061	0.03	0.228	0.03
Total Indirect effect via L/R	-0.008	0.016	-0.012	0.016
Direct effect of Conform	-0.053	0.014	0.239	0.014
Total effect of EGA	-0.064	-0.077	0.246	-0.077
Total Indirect effect via L/R	0.026	-0.053	0.04	-0.053
Direct effect of EGA	-0.09	-0.024	0.206	-0.024
Direct effect of L/R	-0.324	0.668	-0.507	0.668
RMSEA/CFI	0.051/0.868	0.052/0.879	0.052/0.865	0.052/0.879
Rsquared	0.136	0.457	0.45	0.457

Direct Values on LR

Traditionalism	0.081	0.081	0.081	0.081
Individualism	0.14	0.14	0.14	0.14
Authoritarianism	0.079	0.079	0.079	0.079
Conformity	0.023	0.023	0.023	0.023
Egalitarianism	-0.079	-0.079	-0.079	-0.079

Spain	Spain	Spain	Spain	Spain
Total, direct and indirect effects	Cleft	CRight	Comm	CD
	399	282	58	282
Total effect of TRADIT	-0.469	0.45	-0.252	0.45
Total Indirect effect via L/R	-0.165	0.208	-0.151	0.208
Direct effect of Tradit	-0.304	0.242	-0.1	0.242
Total effect of INDIV	-0.22	0.296	-0.257	0.296
Total Indirect effect via L/R	-0.098	0.126	-0.09	0.126
Direct effect of Indiv	-0.122	0.171	-0.167	0.171
Total effect of AUTH	0.038	0.059	0.003	0.059
Total Indirect effect via L/R	-0.023	0.032	-0.021	0.032
Direct effect of AUTH	0.061	0.028	0.024	0.028
Total effect of CONFORM	0.379	-0.158	-0.158	-0.158
Total Indirect effect via L/R	0.024	-0.03	0.021	-0.03
Direct effect of Conform	0.355	-0.128	-0.179	-0.128
Total effect of EGA	0.024	-0.109	0.095	-0.109
Total Indirect effect via L/R	0.051	-0.064	0.047	-0.064
Direct effect of EGA	-0.027	-0.045	0.048	-0.045
Direct effect of L/R	-0.536	0.682	-0.495	0.682
RMSEA/CFI	0.051/0.859	0.051/0.879	0.050/0.855	0.051/0.879
Rsquared	3	0.67	0.473	0.67

Direct Values on LR

Traditionalism	0.308	0.308	0.308	0.308
Individualism	0.182	0.182	0.182	0.182
Authoritarianism	0.043	0.043	0.043	0.043
Conformity	-0.045	-0.045	-0.045	-0.045
Egalitarianism	-0.094	-0.094	-0.094	-0.094

Sweden	Sweden	Sweden	Sweden	Sweden	Sweden	Sweden	Sweden
Total, direct and indirect effects	Cleft	CRight	Centre	Comm	Green	CD	Cons
	264	359	39	67	79	34	325
Total effect of TRADIT	-0.124	0.159	0.064	0.134	-0.124	0.68	-0.069
Total Indirect effect via L/R	-0.036	0.035	0.015	-0.042	-0.012	0.018	0.033
Direct effect of Tradit	-0.087	0.124	0.049	0.176	-0.112	0.662	-0.103
Total effect of INDIV	-0.309	0.534	0.194	-0.36	-0.168	0.042	0.54
Total Indirect effect via L/R	-0.262	0.249	0.112	-0.315	-0.089	0.142	0.242
Direct effect of Indiv	-0.047	0.285	0.082	-0.045	-0.079	-0.1	0.298
Total effect of AUTH	0.285	-0.274	-0.028	-0.112	-0.237	-0.26	-0.171
Total Indirect effect via L/R	-0.018	0.015	0.009	-0.024	-0.007	0.012	0.016
Direct effect of AUTH	0.303	-0.289	-0.037	-0.088	-0.23	-0.272	-0.187
Total effect of CONFORM	0.204	-0.008	0.085	-0.169	-0.034	0.22	-0.047
Total Indirect effect via L/R	0.031	-0.027	-0.012	0.034	0.01	-0.015	-0.027
Direct effect of Conform	0.173	0.018	0.097	-0.202	-0.044	0.235	-0.021
Total effect of EGA	0.262	-0.498	0.001	0.431	0.209	-0.083	-0.493
Total Indirect effect via L/R	0.26	-0.246	-0.111	0.312	0.088	-0.141	-0.24
Direct effect of EGA	0.002	-0.251	0.111	0.119	0.121	0.058	-0.254
Direct effect of L/R	-0.564	0.535	, Ita, Nor,	-0.677	-0.191	0.305	0.521
RMSEA/CFI	0.062/0.869	0.062/0.887	0.060/0.859	0.060/0.87	0.061/0.859	0.061/0.862	0.062/0.888
Rsquared	0.445	0.746	0.082	0.615	0.201	0.472	0.739

Direct Values on LR

Traditionalism	0.066	0.066	0.066	0.066	0.066	0.066	0.066
Individualism	0.465	0.465	0.465	0.465	0.465	0.465	0.465
Authoritarianism	0.029	0.029	0.029	0.029	0.029	0.029	0.029
Conformity	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05
Egalitarianism	-0.46	-0.46	-0.46	-0.46	-0.46	-0.46	-0.46

UK

Total, direct and indirect effects	Cleft	CRight	Centre	Green	Cons
	260	368	138	53	368
Total effect of TRADIT	0.118	-0.104	-0.181	-0.093	-0.104
Total Indirect effect via L/R	-0.06	0.076	-0.028	-0.012	0.076
Direct effect of Tradit	0.177	-0.18	-0.153	-0.081	-0.18
Total effect of INDIV	-0.218	0.339	-0.145	-0.22	0.339
Total Indirect effect via L/R	-0.085	0.109	-0.04	-0.017	0.109
Direct effect of Indiv	-0.133	0.231	-0.105	-0.204	0.231
Total effect of AUTH	-0.161	0.237	-0.003	-0.237	0.237
Total Indirect effect via L/R	-0.031	0.038	-0.014	-0.006	0.038
Direct effect of AUTH	-0.131	0.199	0.011	-0.231	0.199
Total effect of CONFORM	0.115	0.034	0.092	-0.069	0.034
Total Indirect effect via L/R	0.017	-0.023	0.008	0.003	-0.023
Direct effect of Conform	0.097	0.057	0.084	-0.072	0.057
Total effect of EGA	0.202	-0.268	0.069	0.147	-0.268
Total Indirect effect via L/R	0.084	-0.106	0.04	0.017	-0.106
Direct effect of EGA	0.118	-0.162	0.029	0.13	-0.162
Direct effect of L/R	-0.384	0.483	-0.18	-0.075	0.483
RMSEA/CFI	0.043/0.914	0.046/0.911	0.043/0.909	0.043/0.911	0.046/0.911
Rsquared	0.242	0.435	0.071	0.197	0.435

Direct Values on LR

Traditionalism	0.158	0.158	0.158	0.158	0.158
Individualism	0.225	0.225	0.225	0.225	0.225
Authoritarianism	0.079	0.079	0.079	0.079	0.079
Conformity	-0.047	-0.047	-0.047	-0.047	-0.047
Egalitarianism	-0.162	-0.162	-0.162	-0.162	-0.162

APPENDIX 13

National Level Results 1990

AUSTRIA

Total, direct and indirect effects	Cleft	CRight	Nat	Green	CD
<i>1460</i>	<i>455</i>	<i>344</i>	<i>161</i>	<i>90</i>	<i>344</i>
Total effect of TRADIT	-0.427	0.422	-0.052	0.239	0.422
Total Indirect effect via L/R	-0.043	0.06	0.009	-0.051	0.06
Direct effect of Tradit	-0.384	0.362	-0.061	0.29	0.362
Total effect of INDIV	-0.298	0.163	0.17	0.11	0.163
Total Indirect effect via L/R	-0.022	0.031	0.005	-0.027	0.031
Direct effect of Indiv	-0.275	0.131	0.166	0.137	0.131
Total effect of AUTH	0.368	-0.167	0.03	-1.07	-0.167
Total Indirect effect via L/R	0.021	-0.028	-0.004	0.025	-0.028
Direct effect of AUTH	0.347	-0.138	0.034	-1.095	-0.138
Total effect of CONFORM	0.222	0.065	-0.118	0.112	0.065
Total Indirect effect via L/R	-0.016	0.021	0.003	-0.019	0.021
Direct effect of Conform	0.238	0.044	-0.121	0.131	0.044
Total effect of EGA	0.055	-0.005	-0.081	0.005	-0.005
Total Indirect effect via L/R	0.014	-0.02	-0.003	0.017	-0.02
Direct effect of EGA	0.041	0.014	-0.078	-0.012	0.014
Direct effect of L/R	-0.214	0.3	0.044	-0.255	0.3
RMSEA/CFI	0.044/0.931	0.044/0.933	0.041/0.938	0.043/0.936	0.044/0.933
R squared	0.257	0.245	0.054	0.807	0.245
Direct Values on LR					
Traditionalism	0.201	0.201	0.201	0.201	0.201
Individualism	0.104	0.104	0.104	0.104	0.104
Authoritarianism	-0.095	-0.095	-0.095	-0.095	-0.095
Conformity	0.07	0.07	0.07	0.07	0.07
Egalitarianism	-0.065	-0.065	-0.065	-0.065	-0.065

BELGIUM

Total, direct and indirect effects	Cleft	CRight	Centre	Green	CD	Cons
	466	796	242	311	614	182
Total effect of TRADIT	-0.211	0.329	0.005	-0.006	0.442	-0.172
Total Indirect effect via L/R	-0.112	0.088	0.054	0.03	0.065	0.069
Direct effect of Tradit	-0.099	0.241	-0.048	-0.036	0.377	-0.242
Total effect of INDIV	-0.211	0.161	0.063	-0.071	-0.026	0.426
Total Indirect effect via L/R	-0.064	0.05	0.03	-0.025	0.037	0.039
Direct effect of Indiv	-0.147	0.111	0.033	-0.046	-0.063	0.387
Total effect of AUTH	0.181	0.006	0.05	-0.235	0.065	-0.134
Total Indirect effect via L/R	0.013	-0.01	-0.006	0.005	-0.008	-0.008
Direct effect of AUTH	0.168	0.016	0.056	-0.24	0.072	-0.126
Total effect of CONFORM	-0.012	0.109	-0.015	-0.126	0.093	0.079
Total Indirect effect via L/R	-0.022	0.017	0.011	-0.008	0.013	0.014
Direct effect of Conform	0.01	0.093	-0.026	-0.117	0.08	0.065
Total effect of EGA	0.259	-0.06	-0.241	-0.194	0.044	-0.242
Total Indirect effect via L/R	0.076	-0.059	-0.036	-0.044	-0.044	-0.047
Direct effect of EGA	0.184	-0.001	-0.205	-0.15	0.088	-0.195
Direct effect of L/R	-0.393	0.308	0.188	-0.155	0.228	0.244
RMSEA/CFI	0.049/0.886	0.049/0.885	0.050/0.877	0.049/0.883	0.049/0.887	0.050/0.875
R squared	0.291	0.273	0.094	0.218	0.323	0.347

Direct Values on LR

Traditionalism	0.286	0.286	0.286	0.286	0.286	0.286
Individualism	0.162	0.162	0.162	0.162	0.162	0.162
Authoritarianism	-0.033	-0.033	-0.033	-0.033	-0.033	-0.033
Conformity	0.055	0.055	0.055	0.055	0.055	0.055
Egalitarianism	-0.192	-0.192	-0.192	-0.192	-0.192	-0.192

DENMARK

Total, direct and indirect effects	Cleft	CRight	Centre	Nat	Comm	Cons
840	277	126	109	52	143	126
Total effect of TRADIT	-0.113	-0.032	0.269	0.328	-0.165	-0.032
Total Indirect effect via L/R	-0.072	0.085	0.045	0.023	-0.08	0.085
Direct effect of Tradit	-0.041	-0.116	0.224	0.305	-0.085	-0.116
Total effect of INDIV	-0.393	0.382	0.439	0.487	-0.295	0.382
Total Indirect effect via L/R	-0.105	0.382	0.065	0.033	-0.117	0.382
Direct effect of Indiv	-0.288	0.259	0.373	0.454	-0.178	0.259
Total effect of AUTH	0.102	-0.002	-0.043	0.161	-0.271	-0.002
Total Indirect effect via L/R	-0.001	0.001	0.001	0.001	-0.002	0.001
Direct effect of AUTH	0.103	-0.003	-0.044	0.161	-0.27	-0.003
Total effect of CONFORM	0.388	0.058	0.033	-0.39	-0.174	0.058
Total Indirect effect via L/R	-0.008	0.011	0.005	0.003	-0.01	0.011
Direct effect of Conform	0.396	0.048	0.029	-0.393	-0.164	0.048
Total effect of EGA	0.13	-0.373	-0.356	-0.16	0.472	-0.373
Total Indirect effect via L/R	0.142	-0.166	-0.088	-0.045	0.159	-0.166
Direct effect of EGA	-0.012	-0.207	-0.268	-0.115	0.313	-0.207
Direct effect of L/R	-0.323	0.378	0.201	0.102	-0.362	0.378
RMSEA/CFI	0.108/0.639	0.108/0.638	0.108/0.632	0.109/0.622	0.109/0.659	0.108/0.638
R squared	0.322	0.391	0.422	0.363	0.662	0.391

Direct Values on LR

Traditionalism	0.223	0.223	0.223	0.223	0.223	0.223
Individualism	0.325	0.325	0.325	0.325	0.325	0.325
Authoritarianism	0.001	0.001	0.001	0.001	0.001	0.001
Conformity	0.028	0.028	0.028	0.028	0.028	0.028
Egalitarianism	-0.439	-0.439	-0.439	-0.439	-0.439	-0.439

FINLAND

Total, direct and indirect effects	Cleft 98	CRight 115	Centre 77	Green 42	Cons 115
Total effect of TRADIT	-0.352	0.035	0.104	-0.06	0.035
Total Indirect effect via L/R	-0.069	0.057	0.017	-0.014	0.057
Direct effect of Tradit	-0.283	-0.023	0.087	-0.046	-0.023
Total effect of INDIV	-0.251	0.302	0.084	-0.115	0.302
Total Indirect effect via L/R	-0.243	0.2	0.062	-0.046	0.2
Direct effect of Indiv	-0.008	0.102	0.022	-0.069	0.102
Total effect of AUTH	0.243	0.129	0.139	-0.35	0.129
Total Indirect effect via L/R	-0.08	0.064	0.021	-0.015	0.064
Direct effect of AUTH	0.323	0.065	0.118	-0.335	0.065
Total effect of CONFORM	0.096	0.001	0.156	-0.123	0.001
Total Indirect effect via L/R	0.007	-0.005	-0.002	0.002	-0.005
Direct effect of Conform	0.088	0.005	0.158	-0.125	0.005
Total effect of EGA	0.269	-0.426	-0.038	0.099	-0.426
Total Indirect effect via L/R	0.245	-0.201	-0.062	0.046	-0.201
Direct effect of EGA	0.024	-0.225	0.024	0.053	-0.225
Direct effect of L/R	-0.586	0.481	0.149	-0.111	0.481
RMSEA/CFI	0.097/0.684	0.097/0.682	0.097/0.67	0.099/0.647	0.097/0.682
R squared	0.44	0.435	0.118	0.23	0.435

Direct Values on LR

Traditionalism	0.117	0.117	0.117	0.117
Individualism	0.414	0.414	0.414	0.414
Authoritarianism	0.136	0.136	0.136	0.136
Conformity	-0.012	-0.012	-0.012	-0.012
Egalitarianism	-0.418	-0.418	-0.418	-0.418

FRANCE

Total, direct and indirect effects	Cleft 250	CRight 169	Nat 31	Green 97	CD 39	Cons 130
Total effect of TRADIT	-0.141	0.144	0.331	-0.26	0.138	0.025
Total Indirect effect via L/R	-0.196	0.183	0.174	-0.026	0.035	0.149
Direct effect of Tradit	0.056	-0.039	0.157	-0.234	0.103	-0.123
Total effect of INDIV	-0.067	0.288	0.171	-0.048	0.106	0.303
Total Indirect effect via L/R	-0.15	0.141	0.133	-0.02	0.027	0.152
Direct effect of Indiv	0.083	0.147	0.038	-0.028	0.078	0.151
Total effect of AUTH	-0.016	0.061	0.011	-0.017	0.086	0.31
Total Indirect effect via L/R	-0.015	0.025	0.016	-0.002	0.007	0.166
Direct effect of AUTH	-0.001	0.037	-0.005	-0.015	0.08	0.144
Total effect of CONFORM	0.061	0.117	-0.355	0.063	-0.034	0.048
Total Indirect effect via L/R	0.04	-0.039	-0.037	0.005	-0.008	-0.105
Direct effect of Conform	0.02	0.156	-0.318	0.057	-0.026	0.153
Total effect of EGA	0.235	-0.274	-0.241	-0.1	-0.157	-0.26
Total Indirect effect via L/R	0.214	-0.201	-0.19	0.029	-0.039	-0.207
Direct effect of EGA	0.022	-0.074	-0.051	-0.129	-0.119	-0.052
Direct effect of L/R	-0.617	0.579	0.548	-0.083	0.111	0.599
RMSEA/CFI	0.054/0.895	0.053/0.907	0.054/0.892	0.054/0.9	0.053/0.893	0.052/0.907
R squared	0.355	0.475	0.393	0.07	0.069	0.535

Direct Values on LR

Traditionalism	0.318	0.318	0.318	0.318	0.318	0.318
Individualism	0.243	0.243	0.243	0.243	0.243	0.243
Authoritarianism	0.024	0.024	0.024	0.024	0.024	0.024
Conformity	-0.066	-0.066	-0.066	-0.066	-0.066	-0.066
Egalitarianism	-0.347	-0.347	-0.347	-0.347	-0.347	-0.347

GERMANY

Total, direct and indirect effects	Cleft	CRight	Centre	Green	CD
2101	700	697	146	122	697
Total effect of TRADIT	-0.476	0.491	0.142	-0.061	0.491
Total Indirect effect via L/R	-0.108	0.097	0.007	-0.032	0.097
Direct effect of Tradit	-0.368	0.394	0.135	-0.029	0.394
Total effect of INDIV	-0.286	0.312	0.167	-0.261	0.312
Total Indirect effect via L/R	-0.152	0.134	0.01	-0.045	0.134
Direct effect of Indiv	-0.134	0.178	0.157	-0.216	0.178
Total effect of AUTH	0.078	0.048	-0.328	-0.549	0.048
Total Indirect effect via L/R	-0.121	0.105	0.008	-0.036	0.105
Direct effect of AUTH	0.199	-0.057	-0.336	-0.513	-0.057
Total effect of CONFORM	0.21	-0.079	0.122	0.031	-0.079
Total Indirect effect via L/R	0.018	-0.017	-0.001	0.006	-0.017
Direct effect of Conform	0.191	-0.062	0.123	0.025	-0.062
Total effect of EGA	0.134	-0.138	-0.181	0.248	-0.138
Total Indirect effect via L/R	0.091	-0.08	-0.006	0.027	-0.08
Direct effect of EGA	0.043	-0.058	-0.174	0.221	-0.058
Direct effect of L/R	-0.509	0.447	0.034	-0.15	0.447

RMSEA/CFI 0.077/0.814 0.077/0.820 0.077/0.806 0.078/0.806 0.077/0.820
R squared

Direct Values on LR

Traditionalism	0.217	0.217	0.217	0.217	0.217
Individualism	0.3	0.3	0.3	0.3	0.3
Authoritarianism	0.235	0.235	0.235	0.235	0.235
Conformity	-0.038	-0.038	-0.038	-0.038	-0.038
Egalitarianism	-0.18	-0.18	-0.18	-0.18	-0.18

ICELAND

Total, direct and indirect effects	Cleft	CRight	Comm	Cons
	57	314	88	314
Total effect of TRADIT	0.121	0.282	-0.504	0.282
Total Indirect effect via L/R	-0.079	0.111	-0.108	0.111
Direct effect of Tradit	0.201	0.171	-0.396	0.171
Total effect of INDIV	-0.02	0.417	-0.451	0.417
Total Indirect effect via L/R	-0.16	0.224	-0.217	0.224
Direct effect of Indiv	0.14	0.193	-0.234	0.193
Total effect of AUTH	-0.233	-0.282	0.53	-0.282
Total Indirect effect via L/R	0.066	-0.093	0.087	-0.093
Direct effect of AUTH	-0.298	-0.189	0.443	-0.189
Total effect of CONFORM	-0.145	0.025	0.025	0.025
Total Indirect effect via L/R	0.036	-0.046	0.045	-0.046
Direct effect of Conform	-0.18	0.072	-0.02	0.072
Total effect of EGA	0.051	-0.327	0.385	-0.327
Total Indirect effect via L/R	0.127	-0.179	0.173	-0.179
Direct effect of EGA	-0.076	-0.149	0.211	-0.149
Direct effect of L/R	-0.372	0.522	-0.507	0.522

RMSEA/CFI 0.064/0.795 0.067/0.817 0.065/0.825 0.067/0.817
R squared **0.11** **0.524** **0.649** **0.524**

Direct Values on LR

Traditionalism	0.201	0.201	0.201	0.201
Individualism	0.14	0.14	0.14	0.14
Authoritarianism	-0.388	-0.388	-0.388	-0.388
Conformity	-0.18	-0.18	-0.18	-0.18
Egalitarianism	-0.076	-0.076	-0.076	-0.076

IRELAND

Total, direct and indirect effects	Cleft	CRight	CD	Cons
	72	646	200	446
Total effect of TRADIT	-0.451	0.23	-0.11	0.225
Total Indirect effect via L/R	0.006	-0.004	-0.003	-0.001
Direct effect of Tradit	-0.457	0.235	-0.108	0.226
Total effect of INDIV	-0.265	0.129	0.05	0.048
Total Indirect effect via L/R	-0.02	0.02	0.008	0.007
Direct effect of Indiv	-0.244	0.109	0.042	0.04
Total effect of AUTH	-0.059	0.12	0.06	0.03
Total Indirect effect via L/R	-0.019	0.019	0.008	0.007
Direct effect of AUTH	-0.04	0.101	0.052	0.023
Total effect of CONFORM	0.292	0.143	0.128	0.112
Total Indirect effect via L/R	-0.101	0.095	0.042	0.033
Direct effect of Conform	0.393	0.048	0.086	0.079
Total effect of EGA	0.282	-0.106	-0.129	0.01
Total Indirect effect via L/R	0.035	-0.034	-0.014	-0.012
Direct effect of EGA	0.247	-0.072	-0.115	0.022
Direct effect of L/R	-0.278	0.268	0.113	0.094
RMSEA/CFI	0.045/0.904	0.046/0.905	0.046/0.901	0.046/0.9
R squared	0.284	0.278	0.044	0.125

Direct Values on LR

Traditionalism	-0.016	-0.016	-0.016	-0.016
Individualism	0.076	0.076	0.076	0.076
Authoritarianism	0.072	0.072	0.072	0.072
Conformity	0.355	0.355	0.355	0.355
Egalitarianism	-0.127	-0.127	-0.127	-0.127

ITALY

Total, direct and indirect effects	Cleft	CRight	Nat	Comm	Green	CD
	151	451	75	218	165	451
Total effect of TRADIT	-0.226	0.582	-0.069	-0.409	-0.257	0.582
Total Indirect effect via L/R	-0.038	0.064	0.027	-0.141	0.003	0.064
Direct effect of Tradit	-0.188	0.518	-0.097	-0.268	-0.259	0.518
Total effect of INDIV	-0.057	0.126	0.275	-0.293	-0.098	0.126
Total Indirect effect via L/R	-0.039	0.066	0.028	-0.144	0.003	0.066
Direct effect of Indiv	-0.019	0.06	0.247	-0.149	-0.101	0.06
Total effect of AUTH	-0.055	0.12	0.072	-0.009	-0.129	0.12
Total Indirect effect via L/R	-0.025	0.044	0.018	-0.095	0.002	0.044
Direct effect of AUTH	-0.03	0.077	0.054	0.086	-0.131	0.077
Total effect of CONFORM	0.242	-0.057	-0.024	0.24	-0.077	-0.057
Total Indirect effect via L/R	0.01	-0.017	-0.007	0.038	-0.001	-0.017
Direct effect of Conform	0.232	-0.04	-0.017	0.202	-0.076	-0.04
Total effect of EGA	0.02	-0.037	-0.106	0.272	-0.061	-0.037
Total Indirect effect via L/R	0.036	-0.062	-0.026	0.135	-0.003	-0.062
Direct effect of EGA	-0.016	0.025	-0.08	0.137	-0.058	0.025
Direct effect of L/R	-0.158	0.27	0.114	-0.59	0.011	0.27
RMSEA/CFI	0.055/0.849	0.056/0.865	0.055/0.849	0.055/0.866	0.055/0.855	0.056/0.865
R squared	0.072	0.456	0.1	0.524	0.168	0.456

Direct Values on LR

Traditionalism	0.239	0.239	0.239	0.239	0.239	0.239
Individualism	0.245	0.245	0.245	0.245	0.245	0.245
Authoritarianism	0.161	0.161	0.161	0.161	0.161	0.161
Conformity	-0.066	-0.066	-0.066	-0.066	-0.066	-0.066
Egalitarianism	-0.229	-0.229	-0.229	-0.229	-0.229	-0.229

NETHERLANDS

Total, direct and indirect effects	Cleft	CRight	Centre	Green	CD
	218	289	258	70	289
Total effect of TRADIT	-0.179	0.006	-0.272	-0.325	0.006
Total Indirect effect via L/R	-0.086	0.073	0.016	-0.067	0.073
Direct effect of Tradit	-0.093	-0.067	-0.287	-0.258	-0.067
Total effect of INDIV	-0.269	-0.031	0.294	-0.437	-0.031
Total Indirect effect via L/R	-0.1	0.083	0.018	-0.077	0.083
Direct effect of Indiv	-0.169	-0.114	0.275	-0.36	-0.114
Total effect of AUTH	0.074	0.175	-0.122	-0.418	0.175
Total Indirect effect via L/R	-0.111	0.09	0.02	-0.083	0.09
Direct effect of AUTH	0.185	0.085	-0.142	-0.334	0.085
Total effect of CONFORM	0.196	0.351	-0.121	0.106	0.351
Total Indirect effect via L/R	0.001	0.001	0.001	0.003	0.001
Direct effect of Conform	0.196	0.35	-0.121	0.103	0.35
Total effect of EGA	0.328	-0.265	-0.252	0.43	-0.265
Total Indirect effect via L/R	0.187	-0.156	-0.035	0.141	-0.156
Direct effect of EGA	0.142	-0.11	-0.218	0.289	-0.11
Direct effect of L/R	-0.471	0.394	0.088	-0.356	0.394
RMSEA/CFI	0.074/0.839	0.075/0.847	0.074/0.848	0.076/0.836	0.075/0.847
R squared	0.343	0.395	0.343	0.807	0.395

Direct Values on LR

Traditionalism	0.182	0.182	0.182	0.182	0.182
Individualism	0.212	0.212	0.212	0.212	0.212
Authoritarianism	0.235	0.235	0.235	0.235	0.235
Conformity	-0.001	-0.001	-0.001	-0.001	-0.001
Egalitarianism	-0.396	-0.396	-0.396	-0.396	-0.396

NORWAY

Total, direct and indirect effects	Cleft	CRight	Centre	Nat	CD	Cons
	473	275	95	128	78	197
Total effect of TRADIT	-0.421	0.434	0.061	0.039	0.674	0.162
Total Indirect effect via L/R	-0.053	0.049	-0.013	0.031	0.013	0.053
Direct effect of Tradit	-0.368	0.385	0.074	0.008	0.66	0.109
Total effect of INDIV	-0.647	0.434	0.124	0.454	0.105	0.426
Total Indirect effect via L/R	-0.171	0.158	-0.042	0.099	0.044	0.169
Direct effect of Indiv	-0.476	0.276	0.165	0.355	0.061	0.257
Total effect of AUTH	0.07	-0.194	-0.033	0.231	-0.146	-0.186
Total Indirect effect via L/R	-0.005	0.005	-0.001	0.003	0.002	0.005
Direct effect of AUTH	0.075	-0.199	-0.032	0.228	-0.148	-0.191
Total effect of CONFORM	0.378	-0.227	0.229	-0.399	0.096	-0.208
Total Indirect effect via L/R	0.019	-0.018	0.005	-0.012	-0.005	-0.019
Direct effect of Conform	0.359	-0.209	0.224	-0.388	0.101	-0.189
Total effect of EGA	0.363	-0.296	0.047	-0.336	0.066	-0.406
Total Indirect effect via L/R	0.178	-0.165	0.043	-0.103	-0.046	-0.176
Direct effect of EGA	0.185	-0.132	0.004	-0.233	0.112	-0.23
Direct effect of L/R	-0.417	0.385	-0.102	0.242	0.107	0.412
RMSEA/CFI	0.077/0.802	0.076/0.791	0.076/0.776	0.077/0.782	0.077/0.781	0.076/0.79
R squared	0.7	0.443	0.102	0.419	0.462	0.474

Direct Values on LR

Traditionalism	0.127	0.127	0.127	0.127	0.127	0.127
Individualism	0.411	0.411	0.411	0.411	0.411	0.411
Authoritarianism	0.012	0.012	0.012	0.012	0.012	0.012
Conformity	-0.045	-0.045	-0.045	-0.045	-0.045	-0.045
Egalitarianism	-0.427	-0.427	-0.427	-0.427	-0.427	-0.427

PORTUGAL

Total, direct and indirect effects	Cleft	CRight	Comm	CD
	321	279	56	321
Total effect of TRADIT	-0.187	0.17	-0.009	0.17
Total Indirect effect via L/R	-0.044	0.065	-0.082	0.065
Direct effect of Tradit	-0.142	0.105	0.073	0.105
Total effect of INDIV	-0.116	0.221	-0.315	0.221
Total Indirect effect via L/R	-0.031	0.048	-0.058	0.048
Direct effect of Indiv	-0.084	0.173	-0.257	0.173
Total effect of AUTH	-0.028	0.083	-0.164	0.083
Total Indirect effect via L/R	-0.028	0.042	-0.052	0.042
Direct effect of AUTH	0.001	0.041	-0.112	0.041
Total effect of CONFORM	0.133	0.155	-0.186	0.155
Total Indirect effect via L/R	-0.037	0.065	-0.077	0.065
Direct effect of Conform	0.17	0.09	-0.11	0.09
Total effect of EGA	0.132	-0.128	0.201	-0.128
Total Indirect effect via L/R	0.039	-0.062	0.076	-0.062
Direct effect of EGA	0.092	-0.066	0.125	-0.066
Direct effect of L/R	-0.325	0.509	-0.624	0.509
RMSEA/CFI	0.043/0.878	0.044/0.892	0.043/0.873	0.044/0.892
R squared	0.153	0.413	0.585	0.413

Direct Values on LR

Traditionalism	0.128	0.128	0.128	0.128
Individualism	0.095	0.095	0.095	0.095
Authoritarianism	0.082	0.082	0.082	0.082
Conformity	0.128	0.128	0.128	0.128
Egalitarianism	-0.122	-0.122	-0.122	-0.122

SPAIN

Total, direct and indirect effects	Cleft	CRight	Centre	Nat	Comm	Green	CD
	573	447	106	82	168	57	447
Total effect of TRADIT	-0.148	0.474	0.21	-0.19	-0.376	-0.207	0.474
Total Indirect effect via L/R	-0.218	0.217	0.031	0.043	-0.159	0.012	0.217
Direct effect of Tradit	0.07	0.257	0.179	-0.233	-0.218	-0.219	0.257
Total effect of INDIV	-0.202	0.485	0.132	0.135	-0.365	-0.281	0.485
Total Indirect effect via L/R	-0.249	0.249	0.035	0.05	-0.182	0.014	0.249
Direct effect of Indiv	0.047	0.237	0.097	0.085	-0.183	-0.295	0.237
Total effect of AUTH	0.241	-0.054	0.089	0.092	-0.226	-0.397	-0.054
Total Indirect effect via L/R	-0.059	0.059	0.008	0.012	-0.043	0.003	0.059
Direct effect of AUTH	0.3	-0.113	0.081	0.08	-0.183	-0.4	-0.113
Total effect of CONFORM	0.086	-0.055	-0.102	0.07	0.147	0.079	-0.055
Total Indirect effect via L/R	0.03	-0.03	-0.004	-0.006	0.022	-0.002	-0.03
Direct effect of Conform	0.056	-0.026	-0.098	0.076	0.125	0.081	-0.026
Total effect of EGA	0.188	-0.276	-0.018	-0.033	0.175	-0.026	-0.276
Total Indirect effect via L/R	0.174	-0.174	-0.024	-0.035	0.127	-0.01	-0.174
Direct effect of EGA	0.013	-0.102	0.007	0.002	0.048	-0.016	-0.102
Direct effect of L/R	-0.587	0.586	0.082	0.117	-0.428	0.033	0.586
RMSEA/CFI	0.062/0.825	0.062/0.852	0.060/0.827	0.060/0.824	0.061/0.833	0.061/0.821	0.062/0.852
R squared	0.33	0.689	0.07	0.057	0.468	0.314	0.689

Direct Values on LR

Traditionalism	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Individualism	0.424	0.424	0.424	0.424	0.424	0.424	0.424
Authoritarianism	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Conformity	-0.051	-0.051	-0.051	-0.051	-0.051	-0.051	-0.051
Egalitarianism	-0.297	-0.297	-0.297	-0.297	-0.297	-0.297	-0.297

SWEDEN

Total, direct and indirect effects	Cleft	CRight	Centre	Comm	Green	Cons
	242	205	233	57	79	205
Total effect of TRADIT	-0.148	0.005	-0.03	0.039	0.128	0.005
Total Indirect effect via L/R	-0.064	0.068	0.012	-0.072	-0.013	0.068
Direct effect of Tradit	-0.084	-0.063	-0.042	0.111	0.141	-0.063
Total effect of INDIV	-0.377	0.505	0.103	-0.392	-0.056	0.505
Total Indirect effect via L/R	-0.208	0.229	0.041	-0.241	-0.043	0.229
Direct effect of Indiv	-0.169	0.276	0.062	-0.151	-0.013	0.276
Total effect of AUTH	0.369	-0.099	-0.128	-0.224	-0.087	-0.099
Total Indirect effect via L/R	0.02	-0.021	-0.004	0.022	0.004	-0.021
Direct effect of AUTH	0.349	-0.078	-0.124	-0.246	-0.091	-0.078
Total effect of CONFORM	0.242	-0.02	0.037	-0.115	-0.304	-0.02
Total Indirect effect via L/R	0.064	-0.069	-0.012	0.073	0.013	-0.069
Direct effect of Conform	0.178	0.049	0.049	-0.188	-0.317	0.049
Total effect of EGA	0.289	-0.478	-0.058	0.311	0.119	-0.478
Total Indirect effect via L/R	0.236	-0.261	-0.047	0.275	0.049	-0.261
Direct effect of EGA	0.053	-0.218	-0.011	0.036	0.07	-0.218
Direct effect of L/R	-0.506	0.559	0.1	-0.589	-0.105	0.559
RMSEA/CFI	0.086/0.744	0.086/0.774	0.086/0.715	0.086/0.733	0.085/0.72	0.086/0.774
R squared	0.536	0.682	0.041	0.53	0.113	0.682

Direct Values on LR

Traditionalism	0.125	0.125	0.125	0.125	0.125	0.125
Individualism	0.41	0.41	0.41	0.41	0.41	0.41
Authoritarianism	-0.039	-0.039	-0.039	-0.039	-0.039	-0.039
Conformity	-0.126	-0.126	-0.126	-0.126	-0.126	-0.126
Egalitarianism	-0.467	-0.467	-0.467	-0.467	-0.467	-0.467

UK

Total, direct and indirect effects	Cleft	CRight	Centre	Green	Cons
1484	571	444	68	54	444
Total effect of TRADIT	0.147	-0.101	-0.311	-0.105	-0.101
Total Indirect effect via L/R	0.008	-0.01	0.002	0.001	-0.01
Direct effect of Tradit	0.138	-0.091	-0.313	-0.105	-0.091
Total effect of INDIV	-0.443	0.427	0.094	0.094	0.427
Total Indirect effect via L/R	-0.118	0.135	-0.033	-0.01	0.135
Direct effect of Indiv	-0.325	0.291	0.127	0.103	0.291
Total effect of AUTH	0.052	-0.005	-0.013	-0.124	-0.005
Total Indirect effect via L/R	-0.029	0.033	-0.008	-0.002	0.033
Direct effect of AUTH	0.081	-0.038	-0.005	-0.122	-0.038
Total effect of CONFORM	-0.164	0.236	0.329	-0.191	0.236
Total Indirect effect via L/R	-0.053	0.062	-0.015	-0.004	0.062
Direct effect of Conform	-0.111	0.173	0.344	-0.186	0.173
Total effect of EGA	0.305	-0.369	-0.075	0.091	-0.369
Total Indirect effect via L/R	0.107	-0.124	0.03	0.009	-0.124
Direct effect of EGA	0.197	-0.246	-0.105	0.083	-0.246
Direct effect of L/R	-0.383	0.441	-0.107	-0.031	0.441
RMSEA/CFI	0.055/0.890	0.054/0.896	0.052/0.885	0.051/0.886	0.054/0.896
R squared	0.449	0.539	0.116	0.126	0.539

Direct Values on LR

Traditionalism	-0.022	-0.022	-0.022	-0.022	-0.022
Individualism	0.308	0.308	0.308	0.308	0.308
Authoritarianism	0.075	0.075	0.075	0.075	0.075
Conformity	0.14	0.14	0.14	0.14	0.14
Egalitarianism	-0.28	-0.28	-0.28	-0.28	-0.28