

Introduction¹

Referendums provide a unique insight into citizens' political behaviour because they are single-issue polls in which voters are asked to express their approval or disapproval for a specific measure, rather than select an intermediary to express their opinions. Referendums have been held in many European countries to decide participation in the process of European integration. These polls are interesting for the student of politics because they are the only ones that directly address the intersection of national and international, European issues. Unlike European Parliament elections, European referendums are neither pan-European nor concern personalities at the European level. However, referendums are commonly held to be based much more on the issues at hand than MEP elections (van der Eijk et al.), which are seen as forums for voters to express other, often national opinions (Reif and Schmitt). Thus, national referendums on EU treaties should provide us one of the clearest pictures of popular attitudes towards European integration in general and the specific treaties being voted on in particular. But if referendums on European integration are issue-based and reflect popular attitudes, what are these opinions? This paper will attempt to argue that in the case of Denmark there has been consistent support for economic integration to advance prosperity, while there has been consistent opposition to political integration seen as encroaching on such essential elements and symbols of national sovereignty as defence and foreign policy. Thus, these Danish referendums are examples of issue-based voting. The tight margins of approval in most of the Danish referendums and the rejections of the 1992 and 2000 can be explained by relative success in aligning voters' preferences with the treaties at hand. Danish voters are consistent in their approach to European integration but vary support for referendums based upon the perceived sum of the costs of the loss of political sovereignty and benefits of the improved economic conditions presented by the treaties in question.

¹ This paper could not have been completed without the essential help of Mads Gregersen, Ari Helgason, and Marko Lepik.

Background on Danish Referendums

Due to the relatively small, though growing, number of referendums held on European integration, a systematic study of referendums covering all EU member-states is not possible. Likewise the use of referendums varies widely. It is for this reason that it is reasonable at this time to examine just one country. Thanks to its frequent use of referendums to decide participation in integration treaties, Denmark is one of the best choices.² It has held referendums on accession to the EC, the Single European Act, the Maastricht Treaty, the Maastricht Treaty as qualified by the Edinburgh Agreement, the Treaty of Amsterdam, and on participation in the euro. These six referendums are useful objects of study because their results cannot be easily written off: they show an established history of European integration referendum voting in Denmark and their results cannot easily be dismissed as irrelevant, thanks to their relative controversy and independent nature.³ Most referendums were quite close and not all passed, with support, in chronological order: 63.4% in 1972, 56.2%, 49.3%, 56.7%, 55.1%, and 46.8% in 2000 ('Referendum of the 28 September 2000'). Nor were these votes novelties in Danish political history, as Denmark has held referendums on a variety of topics throughout the 20th Century, including amendments to the Constitution and changes in the minimum voting age.⁴ Furthermore, extensive surveys have been taken after, and often before, these six referendums to examine voter attitudes and demographics, enabling one to examine the evolution of attitudes over time.

The Danish Constitution allows for several forms of referendum, with the one pertinent to European integration being the referendum on transferring sovereignty to international organizations. This referendum is specified in Article 20 of the Constitution, which states that

2 Ireland has also had frequent referendums on European integration.

3 By independent one means that Danish referendums have not coincided with national elections, which has been seen to artificially inflate turnout in several other European cases.

4 This is in contrast to such countries as the United Kingdom, which held the only referendum in its history in 1975 on continued membership of the EC.

treaties ceding sovereignty must be approved by a super-majority of the Folketing (the Parliament) of at least five sixths of all MPs, while in the absence of a super-majority the treaty in question may be approved by a simple majority in a referendum (Hug, 32).⁵ Referendums are often categorised by whether they are binding or advisory for the government and whether they are automatically called or at the discretion of an organisation, whether the government or an opposition group (Hug, 24). The Article 20 referendum is thus a binding automatic one, in that the failure of the Folketing to ratify the treaty then requires a referendum to approve it and that this approval is the ratification (or rejection) of the treaty determining its final status. However, there is more leeway than one may think: the government has several times opted to bind itself to an essentially Article 20 referendum despite the absence of any constitutional requirement, after a vote in the Folketing had already approved the treaty, such as the Maastricht Treaty as packaged with the Edinburgh Compromise or the Single European Act (Hug, 24).

Theoretical Background

There are several schools of thought that seek to explain referendum voting, with them broadly divided into theories of influence and ones of issue voting. The former suggests that referendum voters choose whether to vote Yes or No in a referendum based on the influence of factors unrelated to the issues immediately at hand. For instance, several scholars suggest that referendum voters use their votes to express their approval or disapproval of the current governments, which are normally the instigators of the referendums in question. Such thinking has its roots in Reif and Schmitt's theory of European Parliament elections as second-order national

⁵ Many scholars state that the Danish constitutional system of referendums is designed to protect the rights of minorities. It is perhaps ironic that it is potentially much easier for the government to gain approval of the transfer of sovereignty by referendum than by parliamentary vote. However, most references to Danish referendums as a tool for minority protection are most likely considering the referendum allowed for in Article 42 of the Constitution, in which a group of MPs making up at least one third of the Folketing can force a referendum on any issue. Despite its existence and frequent reference in literature, this form of referendum has never been held. This is perhaps because the one third threshold is actually quite difficult to reach for all but the largest political parties.

elections, but referendum scholars have not simply transposed the theory to a new context.

Schneider and Weitsman suggest that referendum campaigns see voters pulled between punishing their current governments and voting on the issues at hand. Franklin and others have elaborated on this explanation to allow for additional nuance while still retaining the central assertion that most referendum voting is done with punishing or rewarding the government as its aim (Franklin et al.; Franklin). Another explanation focuses on the influence of media and political communications on voters, suggesting that their form and content is key to explaining voting behaviour. Mendelsohn and Cutler and Leduc all highlight the role of learning during Canadian referendum campaigns, while Siune and Svensson stress the influence of the focus and frequency of communications on elections results.

However, Siune and Svensson note that intense voter communication has not led to increased obedience to the party line (Siune and Svensson, 106). Rather, voters become better informed throughout referendum campaigns (Mendelsohn and Cutler), with this increased knowledge used to determine voting positions most faithful to long-held individual attitudes (Siune and Svensson; Svensson). Accepting the issue voting explanation as more convincing thanks to persuasive empirical support (Gary et al.; Svensson; Qvortup), the question is then to the nature of these attitudes. In the Danish context there exist several attitudes put forward as explaining referendum voting. Most simply is the economic one, that voters seek to improve their economic well-being (Siune and Svensson). This is supported by general theories of economic voting which hold that voters are attuned to the political factors that influence their economic condition (Powell and Whitten; Whitten and Palmer; Royed et al.). However, Lawler suggests that political attitudes are the key determinant in Danish voting. More specifically, the Scandinavian progressivist programme of international affairs based on the institution of the nation-state is in conflict with the EU, and Danish voters in referendums on European integration are forced to weigh the potential

benefits European integration and the loss of the sovereignty so necessary for a politics of progressive internationalism (Lawler, 566).

As Siune and Svensson observe, there is evidence that both economic and political attitudes influence the choices made by voters in Danish referendums on European integration (Siune and Svensson, 103). Both Siune and Svensson and Lawler note that the loss of political sovereignty is a key concern of Danish voters, while likewise there is good evidence of the importance of economic concerns in influencing voting behaviour. Thus one suggests that Danish referendum voting can be explained by a combination of economic political influences. As outlined by Lawler, the key political concern of Danish voters is that of maintaining the progressivist traditional of foreign affairs in the face of European integration. Thus, in choosing whether to approve the referendums on European integration Danish voters are faced with a significant political disadvantage if they ratify the treaties in question. Likewise, there is significant economic advantage in the approval of ever closer European integration, granting Danish producers and consumers ever greater participation in the European-wide single market.

*Methods*⁶

One asserts that in Danish referendums on European integration voters chose how to act based upon long held, personal attitudes. Specifically, voters weigh the costs and benefits of integration based on perceived economic and political advantages and disadvantages. While understandably all advantages encourage voting for increased integration and all disadvantages discourage support, voters for the treaties mostly base their support on promised economic advantages, while those voting No chiefly do so because of political reasons, particularly the loss of national sovereignty (c.f. Siune and Svensson, 110). To test this simple logistic regressions are

⁶ See the Appendices for much more detail for each survey, including the complete regression equations and SPSS output tables.

performed on a set of opinion surveys held right after five of six Danish referendums on European integration: in 1972 with the EC accession treaty, in 1986 with the Single European Act, in 1992 and 1993 with the Maastricht Treaty in its original and then modified form, and in the 2000 referendum on participation in the euro. The 1998 referendum on the Amsterdam Treaty is excluded because no survey dataset is available. These regression models provide information on how successfully one can predict voting patterns using the four variables of economic advantage, political advantage, economic disadvantage, and political disadvantage. The variables on political advantage and economic disadvantage are used in order to investigate the possibility that alternate hypotheses are correct, with one or both more influential on voting results than economic advantage or political disadvantage. As Danish referendums have seen various levels of success, including the 1992 and 2000 referendums failing to pass, one cannot expect to see consistent levels of support. Rather, one looks for a consistent correlation between economic advantages and voting Yes, and political disadvantages and voting No, showing that while the levels of the attitudes towards integration may change, the reasons do not.

Unfortunately performing such comparisons over time is difficult, as the surveys on the European integration referendums have been designed and administered by a variety of different organizations. In the absence of common practices, each survey asks different questions. Thus time-series data cannot be easily constructed. Since the polling was semi-random and not panel-based, there is no way of knowing if respondents are present in multiple surveys. Thus one cannot track individual attitudes over time, and so aggregate attitudes will be more difficult to compare. The conclusions must be relatively weak, as given the nature of the datasets only correlation within each survey can be shown. Full details about the regression models and how they were created are provided in the appendices.

EF-Gallup 1972 is survey that consists of responses by 1996 respondents to 70

questions. Conducted almost immediately after the 1972 referendum, the survey is composed of respondents selected by a mixture of strata and random sampling. Despite this the self-reported voting patterns are quite similar to the official numbers, with 64.9% voting Yes and 35.1% choosing no in the sample, compared to 63.4% and 36.6% actually ('Referendum of the 28 September 2000'). Unlike later surveys, this survey does not directly ask voters why they voted the way they did. However, it does ask respondents what they believe are the biggest disadvantages and advantages of Danish membership in the EC. Because it was the first referendum held in Denmark on European integration, responses cannot not show longly-held beliefs about European integration. However, as the survey was conducted over nine days beginning five days after the referendum, one can assume that attitudes towards European integration had essentially no time to be affected by the circumstances of EC membership. The responses reflect contemporary attitudes toward European integration, and so the survey can serve as a point of comparison for the other surveys. The disadvantage variables concern increased immigrant workers and the loss of political autonomy. The advantage variables are about better opportunities for agriculture and increased contact with the outside world. Performing a binary logistic regression with the variables gives results somewhat consistent with the hypothesis that support for integration tends to come from those mindful of economic advantages, while opposition comes from those more mindful of political disadvantages. Predictably the advantages made one more likely to vote for the referendum, and vice versa. While the political disadvantage was a stronger contributor to the probability that the respondent would vote against the treaty, surprisingly the political advantage also had more effect on the likeliness of voting Yes than the economic advantage. Statistical measurements of the quality of the model are somewhat unclear, leaving one with contradictory evidence on whether

The second Danish referendum on integration was in 1986 and concerned the adoption of the Single European Act treaty. Also conducted by Gallup, the survey was conducted

immediately following the referendum of February 27 and through March. As with the 1972 survey, respondents were selected by random sampling within strata. As before, in this dataset variables are used representing political and economic advantage and disadvantage. The one exception is the absence of a variable measuring perceptions of economic disadvantage. However, as this paper's hypothesis is that perceived economic advantages and political disadvantages explain Danish referendum voting, this should not be a serious problem. As before one finds with the regression model that the advantages correlate with an increased likeliness to vote for the treaty and vice versa. The regression equation fits relatively well with the sample data, yet there is not actually evidence that voting is dependent upon the independent variables chosen.

Denmark's third referendum on European integration was in 1992 on the Maastricht Treaty. The accompanying survey used in this project was carried out by AIM Research and did not involve Hans Jørgen Nielsen, the primary investigator in the previous two studies. Unlike the previous surveys respondents were selected by simple random sampling. This time respondents were interviewed both before and after the referendum. The first interviews took place the three months before the June 2 referendum, with the follow-up ones afterwards. In order to stay consistent with the other surveys, only data from the second round of questioning is used.⁷ The regression model created does not include the economic disadvantage variable, as it has no influence upon the model and was automatically excluded by the statistics software. As before, both advantages predict voting for the treaty while the disadvantage predicts voting No. Again, the evidence is mixed for a correlation between attitudes towards economic advantages and political disadvantages and voting behaviour.

The defeat of the 1992 Maastricht Treaty led to the renegotiation of Danish participation in the form of Edinburgh Agreement. The treaty was then put with this accompanying agreement to

⁷ It should be noted that there are not significant differences between the results before and after the referendum, with the exception of those undecided about their voting choices.

referendum in 1993. Like the previous year, the survey was conducted by AIM Research for the investigators Karen Siune, Ole Tonsgaard, and Palle Svensson. Unlike the 1992 survey there is only one time period to the survey, with all data taken over the month of July, over a month after the May 18 vote. Respondents were asked what was the most important reason for their vote, with four options good fits for the schema: the inability to manage outside of the EC (this will be considered a political advantage), general economic advantage, the desire to not cooperate on foreign policy (thus, a political disadvantage), and the belief that there are not economic advantages (that is, the belief that there are economic disadvantages). In performing a regression on the 907 cases one discovers that the political disadvantage response corresponds perfectly with voting patterns, with all those voting No opposed to foreign policy cooperation. Another regression was performed excluding this variable in order to examine the influence of advantages and economic disadvantage. In this model the economic disadvantage variable was automatically excluded for having no influence, which is not surprising considering that only one respondent cited this as their main reason for voting against the treaty.

The final survey covers the referendum on the euro in 2000.⁸ The survey was conducted over the month of October, the referendum having been held on September 28. For this survey the primary investigators are Torben Worre and Hans Jørgen Nielsen. Thus the survey is somewhat different and, most importantly, the reasons why respondents voted the way they did were not categorized in the same way but instead left in text summaries. Because of this variables reflecting what respondents believe would be the effect of approving the treaty will be used to examine the perceived advantages and disadvantages of further integration. Despite this variables for all but the political advantage can be found, and it is not surprising that political advantages are not mentioned for a referendum specifically on joining the common currency. The regression model created with

⁸ There was a referendum in 1998 on the Amsterdam Treaty, yet there does not appear to have been a survey conducted around it.

the three variables provide strong predictive qualities, with the respective variables contributing as expected. That being said, one sees the general negative attitude toward the referendum, which failed to pass, as together the negative coefficients are larger in magnitude than the positive one and the y-intercept.

Discussion

The contradictory results seen in all the surveys examined here make it difficult to disprove the null hypothesis that no relationship exists between perceived political disadvantages and economic advantages and voting patterns in referendums on European integration. However, despite the lack of authoritative statistical support one can still suggest some interesting findings. As turnout has always been high, with at least 75% of the eligible population participating in each referendum ('Referendum of the 28 September 2000'), it is difficult to attribute differences in support to certain groups of potential voters abstaining. Thus differences in support, particularly the 1992 and 2000 rejections, could be explained by voters changing their positions, moving from support for integration in one referendum to opposition in another. This would seem to indicate a fickle electorate, however consistently strong correlations between the common reasons and voting patterns would suggest another possibility, that different referendums address different issues and voters determine where the topics land on their static matrices of support—that is, opinions are not relatively static but the issues are not. It seems plausible that the continued importance of the economic variable is due to the *relative* weight given to it.

Such a schema of relative weights provides a good explanation for the two rejected treaties. Some might suggest that the shift seen from the 1992 referendum to the 1993 one, from 49.3% to 56.7% support, is due to the result of intense campaigning among treaty supporters in the interval (Siune and Svensson, 104). However, such an explanation discounts a consistent approach

to European integration, suggesting that a sizeable portion of Danish voters is undecided and thus swayed by political campaigns. The five surveys examined in this paper do not support such a hypothesis, as there are very few wavering voters, with majorities reporting they already knew how they would vote before the referendums were announced. If individual attitudes are dearly-held, then the change in conditions implied by the Edinburgh Agreement in 1993 must surely be more important than any campaigning, as it changed the nature of the agreement and this removed common points of opposition from consideration. Siune and Svensson's research supports this finding, showing that support for integration closely correlates with voting patterns and that campaigns have little to no effect (Siune and Svensson, 104-105).

Thus, Yes voters prioritize economic issues and downgrade political ones, thus seeing further integration in primarily economic terms. Despite whatever their attitudes about the economic value of European integration may be, No voters then place political issues at the centre of their decision-making process on voting, meaning that economic advantages are understandably not mentioned when asked what is the main reason for their votes (Siune and Svensson, 103). This can be most clearly seen in the 1993 referendum, in which every person who cited the political disadvantage variable as an influence voted No. The clear importance of the political disadvantages and the absence of any influence on the part of economic disadvantages in the regression model shows that opposition to European integration, at least in this referendum, is strongly based on opposition to increased political cooperation, particularly in international relations. The non-influence of economic disadvantages suggests that either voters do not care for their economic self-interest or that Danish voters do not see European integration as harmful to their economic interests. The latter option is clearly much more plausible.

This importance of the relative weights of the variables suggests that further research on Danish referendum voting could focus on whether correlations exist between domestic economic

conditions and international politics and voting patterns. Thus one might find that the 1992 referendum occurred at a time in which Danish foreign policy was seen to diverge significantly with that of other European member-states. Even economically the situation was not favourable, as Siune and Svensson note that unemployment had been growing since the last treaty (Siune and Svensson, 108; 'National accounts and balance of payments'). Likewise the 2000 referendum on the euro occurred at a time in which the Danish economy was in particularly good shape, with the most people employed ever. This period also saw a shift from an economy driven by exports to one driven by domestic consumption ('National accounts and balance of payments'). Thus one might conclude that the combination of new-found economic prosperity and a reduced reliance on external trade made further economic integration less pressing than in the past. Put simply, if in the past Yes voters approved European integration in order to improve the domestic situation, by 2000 circumstance had changed such that it seems these voters no longer saw any improvement to be gained by approving another treaty. With essentially apathy about the economic advantages of increased integration reigning, the political disadvantages were free to come to the fore.

The economic disadvantage variable has so little effect that it is often excluded from the regression models by SPSS. There may be several reasons for this, the first being there may be a broad consensus in Denmark developed over the years that European integration has been to the economic benefit of the country. But then would not the economic advantage variable also cease to have any predictive power, as it is accepted equally by those who vote Yes and those who vote No? In the surveys the questions were worded such that the respondent is asked to explain the main reasons behind their voting choice, and thus one cannot know from these datasets whether No voters shared this perspective. Second, it may be that respondents who voted No find it to be less pressing than political objections to integration, perhaps because such economic issues are less important for this group of voters. There is some evidence to support this, as Copenhagen and the

surrounding region, the wealthiest part of Denmark, has voted against every treaty, with only the Amsterdam treaty having less than a 10% spread between Yes and No.⁹ For such affluent voters issues such as the expansive (and expensive) international humanitarianism mentioned by Lawler appear to be more important, showing that economic self-interest is not the deciding factor to opposition to increased integration. Thus the perhaps peculiar situation seems to exist that opposition to cooperation with other nations is not due to inward-looking, isolationist attitudes but instead is based on a desire for a more expansive, truly global form of international cooperation.

The political advantage variables played an unforeseen role, often showing more influence on the probability of a respondent voting Yes than the economic advantage variables. At the same time the political advantage variables proved to be very good predictors of No voting patterns. How can one explain this situation? First, the 1972 referendum may be considered somewhat unique, as Denmark was only then choosing to embark on the process of European integration. In the 1992 and 1993 the political advantages are both more influential than the economic ones, but the 'advantage' is continued membership of the EU: Yes voters stated they voted the way they did primarily. While this might imply that they find many advantages in EU membership, it may be that these voters see no great benefit from the EU but fear that change would be costly, due to a weakened economic or political position. Either way, it is not a statement of desire for *additional* European integration. Not surprisingly, the discourse around referendums, both before and after, as often played up such a potential as each side seeks to dramatise the vote. This reason for voting is not a powerful affirmation of a belief in the improved international relations offered by European integration but instead is a conservative statement, showing a fear of disturbing the status quo. Likewise, while the advantage used in the 2000 referendum regression model is classified as economic, the survey question with which respondents are asked to agree or

⁹ In this referendum the vote was actually very close, with 49.2% voting Yes and 50.8% voting No ('Referendum of the 28 September 2000').

disagree mentions 'binding cooperation' and again suggests a maintenance of the status quo.¹⁰ Thus, while one can say that political advantages were important reasons why respondents chose to vote Yes, the advantages were not actually new but merely the maintenance of the status quo. Thus this paper's thesis stands, as voting about *increased* European integration can be explained by economic advantages and political disadvantages. Insofar as the treaties being put to vote do not have any effect on existing European obligations the status quo voters should not. In fact, it may then be logical for them to vote No, as one assumes that a strong contentment with the current situation would mean a desire to prevent any disturbance of this by the adoption of new treaties. However as noted earlier, both sides of the debate have found it expedient to play up the notion that a defeat of an integration referendum is a roll-back of the status quo. It is for this reason, one assumes, that status quo voters do not vote No or even simply abstain, fearing that doing so would be a failure to defend the current situation.

Conclusion

While the regression models of the five referendums examined were unable to provide conclusive evidence of correlation, there appears to be reasonable evidence that in all the Danish referendums examined voting patterns could be determined based on the variables of economic advantage and political disadvantage.¹¹ Those sensitive to the former vote Yes, while those more sensitive to the latter vote No. Thus there is good evidence to support Siune and Svensson's analysis immediately after the 1992 referendum that voters rejected it based on fundamental attitudes, rather than (lack of) political communication or a desire to punish the government. As such one can conclude with moderate certainty that the Danish attitudes toward European integration are economic self-interest and principled autonomy, with voters only embracing further

¹⁰ See Appendix 5 for more information, including the full text of the survey question.

¹¹ Likewise, despite not having survey data on the referendum, it does not seem unreasonable to believe that the voting in 1998 Amsterdam referendum operated under these same forms. The fact that the referendum passed and is generally little-noted would seem to support this.

integration when the economic benefits outweigh the loss of political sovereignty.

Appendix 1

The Logistic Regression Model

The 1972 survey is stored in the Danish Data Archives as DDA-0006; the archives provided a codebook in plain text format and the dataset in SPSS data format. The regression for the 1972 dataset is arrived at by performing a binary logistic regression in SPSS. The independent variables are all binary variables with the values Mentioned and Not Mentioned for the advantages and disadvantages in question: the disadvantage of more immigrant workers with EC membership (v24), the disadvantage of less political autonomy (v27), the advantage of better opportunities for agriculture (v36), and the advantage of more contact with the rest of the world (v38). The variables were entered into the equation using the “Forward: Conditional” method as categorical variables using the Indicator contrast. The dependent variable (v23) indicates how the respondent voted, and only the cases reflecting the Yes (translated automatically by SPSS from 2 to 1) and No (translated from 1 to 0) votes were selected beforehand for the use in the equation—that is, respondents who reported casting blank ballots or not voting were excluded. Thus a total of 1671 cases were evaluated from a complete dataset of 1996 respondents. Upon performing the logistic regression the SPSS statistics software gives the variables such that one may construct the following equation:

$$\text{logit}(\pi) = .625 + 1.323X_{v24} + 1.384X_{v27} - 1.126X_{v36} - 1.444X_{v38}.$$

All coefficients and the y-intercept have moderately large Wald statistics and are significant at $< .001$. Because of the coding of variables, with the Yes values coded as 1 for the dependent variable but 0 for the independent variables, negative coefficients indicate an increased probability to vote Yes. The -2 Log Likelihood is 1771.703. The χ^2 value for the equation is 393.484 with $df = 4$ and a significance of $< .001$. These values all disprove the null hypothesis of independence among the variables. However, the Nagelkerke R^2 approximation is .289, suggesting that the model is not a significant improvement over the sample mean. Thus there appears to be correlation between the variables yet the regression

model cannot accurately fit the sample data.

SPSS Output

Omnibus Tests of Model Coefficients				
		Chi-square	df	Sig.
Step 1	Step	120.071	1	.000
	Block	120.071	1	.000
	Model	120.071	1	.000
Step 2	Step	98.251	1	.000
	Block	218.323	2	.000
	Model	218.323	2	.000
Step 3	Step	105.826	1	.000
	Block	324.148	3	.000
	Model	324.148	3	.000
Step 4	Step	69.336	1	.000
	Block	393.484	4	.000
	Model	393.484	4	.000

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	2045.116(a)	.069	.095
2	1946.864(a)	.122	.169
3	1841.039(a)	.176	.243
4	1771.703(b)	.210	.289

a Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

b Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	v27(1)	1.236	.114	117.677	1	.000	3.441
	Constant	-.244	.094	6.754	1	.009	.784
Step 2(b)	v27(1)	1.266	.118	114.457	1	.000	3.547
	v36(1)	-1.082	.112	93.491	1	.000	.339
	Constant	.323	.113	8.232	1	.004	1.382
Step 3(c)	v24(1)	1.229	.122	102.004	1	.000	3.418
	v27(1)	1.292	.123	110.278	1	.000	3.640
	v36(1)	-1.211	.118	105.911	1	.000	.298
	Constant	-.443	.139	10.204	1	.001	.642
Step 4(d)	v24(1)	1.323	.126	110.753	1	.000	3.755
	v27(1)	1.384	.127	118.388	1	.000	3.990
	v36(1)	-1.126	.120	87.836	1	.000	.324
	v38(1)	-1.444	.190	57.657	1	.000	.236
	Constant	.625	.201	9.680	1	.002	1.868

a Variable(s) entered on step 1: v27.

b Variable(s) entered on step 2: v36.

c Variable(s) entered on step 3: v24.

d Variable(s) entered on step 4: v38.

Appendix 2

The Logistic Regression Model

The 1986 dataset is code number DDA-1192 in the Danish Data Archives. Again a binary logistic regression is performed with the dependent variable (v51) limited to only the Yes and No responses, giving a total of 756 respondents. In this dataset Yes is coded for as 1 and No as 2, and so SPSS will translate the values into 0 and 1 respectively. Three variables indicating responses to the question of why the respondent voted the way they did were chosen as dependent variables: voting Yes for 'the economy generally' (v54), voting Yes due to the desire to stay in the EC (v59), and voting No due to the desire to maintain independence and sovereignty (v66). Dummy variables of these three were created, with Mentioned staying the same as value 1 and all the other options being combined into Not Mentioned, with value 0. These three dependent dummy variables were marked as categorical variables using the Indicator contrast and were entered into the model using the Forward Conditional method. The resulting regression model is as follows: $\text{logit}(\pi) = -21.164 + 21.213X_{v54D} + 21.154X_{v59D} - 21.082X_{v66D}$. All coefficients have Wald statistics of $< .001$ and significances of $> .995$. These numbers strongly suggest that the null hypothesis of independence between the variables is true, in contrast to the χ^2 variable whose value of 398.055 at $df = 3$ and a significance $< .001$ strongly argues against the null hypothesis. The relatively low -2 Log Likelihood values of 620.822 supports the null hypothesis, while the Nagelkerke R^2 value of .553 suggests that the model fits decently with the sample data. Thus the model seems to be a good fit with the sample data, yet at the same time there is not enough evidence to disprove the null hypothesis of independence.

SPSS Output

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	178.789	1	.000
	Block	178.789	1	.000
	Model	178.789	1	.000
Step 2	Step	143.033	1	.000
	Block	321.822	2	.000
	Model	321.822	2	.000
Step 3	Step	76.233	1	.000
	Block	398.055	3	.000
	Model	398.055	3	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	840.088(a)	.211	.285
2	697.055(a)	.347	.468
3	620.822(a)	.409	.553

a Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	v54D(1)	21.209	3281.741	.000	1	.995	16261745 97.548
	Constant	-21.203	3281.741	.000	1	.995	.000
Step 2(b)	v54D(1)	21.451	3191.774	.000	1	.995	20695508 46.081
	v59D(1)	21.389	3852.024	.000	1	.996	19454140 38.710
	Constant	-42.474	5002.551	.000	1	.993	.000
Step 3(c)	v54D(1)	21.213	3202.713	.000	1	.995	16313641 75.940
	v59D(1)	21.154	3872.288	.000	1	.996	15391200 92.985
	v66D(1)	-21.082	4947.418	.000	1	.997	.000
	Constant	-21.164	7051.874	.000	1	.998	.000

a Variable(s) entered on step 1: v54D.

b Variable(s) entered on step 2: v59D.

c Variable(s) entered on step 3: v66D.

Appendix 3

The Logistic Regression Model

The survey for the 1992 referendum on the Maastricht treaty is coded as DDA-1743 in the Danish Data Archives. Selecting on those who voted Yes or No produced a sample population of 692 respondents. Again a binary logistic regression is performed with the dependent variable indicating who respondents voted (v210) and four dummy independent variables representing economic advantage (v225D), political advantage (v228D), economic disadvantage (v248D), and political disadvantage (v236D). The dummy variables were again created by combining multiple values into the two values Mentioned (coded as 1) and Not Mentioned (coded as 0). Likewise, they were marked as categorical variables with the Indicator contrast and entered into the model using the Forward Conditional method. The model given by SPSS is as follows: $\text{logit}(\pi) = -20.703 + 21.203X_{v225D} + 20.702X_{v228D} - 21.084X_{v236D}$. Variable v248D was excluded from the model automatically by SPSS because it had no effect upon the regression equation. Predictably, the advantages contribute positively to the probability that the respondent will vote yes, while the disadvantage contributes negatively. All the coefficients and the y-intercept have Wald values of $< .001$ and significances $> .995$. This argues strongly in favour of the null hypothesis of independence being true. Likewise the -2 Log Likelihood test has a relatively small value. In contrast, the χ^2 value is 447.603, with $df = 3$ and a significance $< .001$. Similarly, the Nagelkerke R^2 value is .635, indicating a moderately strong fit with the sample data. Thus the evidence remains barely mixed at best, with one unable to disapprove the null hypothesis.

SPSS Output

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	251.503	1	.000
	Block	251.503	1	.000
	Model	251.503	1	.000
Step 2	Step	162.909	1	.000
	Block	414.412	2	.000
	Model	414.412	2	.000
Step 3	Step	33.191	1	.000
	Block	447.603	3	.000
	Model	447.603	3	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	707.721(a)	.305	.406
2	544.811(a)	.451	.601
3	511.620(a)	.476	.635

a Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	v225D(1)	21.755	3249.414	.000	1	.995	28045320 47.435
	Constant	-21.203	3249.414	.000	1	.995	.000
Step 2(b)	v225D(1)	21.198	3249.413	.000	1	.995	16072755 75.724
	v236D(1)	-21.208	3326.398	.000	1	.995	.000
	Constant	.005	4650.120	.000	1	1.000	1.005
Step 3(c)	v225D(1)	21.203	3178.337	.000	1	.995	16158297 44.416
	v228D(1)	20.702	6148.136	.000	1	.997	97931153 3.779
	v236D(1)	-21.084	3326.398	.000	1	.995	.000
	Constant	-20.703	7678.953	.000	1	.998	.000

a Variable(s) entered on step 1: v225D.

b Variable(s) entered on step 2: v236D.

c Variable(s) entered on step 3: v228D.

Appendix 4

The Logistic Regression Model

The 1993 survey is number DDA-1784 in the Danish Data Archives. In this dataset there are a total of 907 who report they voted Yes or No. A binary logistic regression is performed with voting behaviour (v69) as the dependent variable. Of the independent variables, the inability to manage outside of the EC (v72) is used as the political advantage, general economic advantage (v78) as such, the desire to not cooperate on foreign policy (v95) as the political disadvantage, and the perceived absence of economic advantage (v102) as the economic disadvantage. Dummy variables are made from these variables in the format Mentioned and Not Mentioned for the sake of simplicity and are used in the regressions created by SPSS as categorical variables with the Indicator contrast. SPSS unsurprisingly finds that v95 is a perfect match, as all who mentioned not wanting foreign policy cooperation voted No on the referendum. In an effort to see the role of the other variables, v95 is excluded and the regression model created anew. In the second model v102 is automatically excluded as with only one respondent mentioning it, it has no discernible influence on the model. Despite this the remaining two variables contribute to a model which has some success: $\text{logit}(\pi) = -42.183 + 21.465X_{v72D} + 21.160X_{v78D}$. The χ^2 value is 405.482 with $df = 2$ and a significance of $< .001$. Likewise the -2 Log Likelihood value is 824.574 and R^2 shows a decent improvement of .486 over the sample mean. However, the coefficients and the y-intercept all have Wald values of $< .001$ and significances of $> .993$, indicating that the variables have no effect on voting. Thus the two regression models provide very good evidence of the important influence of political disadvantages and the unimportance of economic disadvantages on voting against European integration. However, the role of political and economic advantages is not clarified.

*SPSS Output***Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	288.208	1	.000
	Block	288.208	1	.000
	Model	288.208	1	.000
Step 2	Step	117.273	1	.000
	Block	405.482	2	.000
	Model	405.482	2	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	941.847(a)	.272	.367
2	824.574(a)	.360	.486

a Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	v72D(1)	21.396	2691.517	.000	1	.994	19605286 52.274
	Constant	-21.203	2691.517	.000	1	.994	.000
Step 2(b)	v72D(1)	21.465	2591.212	.000	1	.993	20999869 93.076
	v78D(1)	21.160	3823.614	.000	1	.996	15469329 77.735
	Constant	-42.183	4618.918	.000	1	.993	.000

a Variable(s) entered on step 1: v72D.

b Variable(s) entered on step 2: v78D.

Appendix 5

The Logistic Regression Model

The 2000 survey is DDA4013 in the Danish Data Archives. A total of 962 respondents reported they voted Yes or No in the referendum. A binary logistic regression was performed using SPSS on this sample set, with three . There were only three independent variables as none of the potential variables addresses an political advantage of approving the referendum. While joining the euro is ostensibly an economic issue, it must be acknowledged that there are also political issues at play. reflecting this the variable used to reflect economic advantage (v37) measures levels of agreement to the following nuanced statement: ‘Because of the level of economic interdependence today it is in reality through more binding cooperation that we as Danes get the most influence over the development in Denmark’ (DDA4013 codebook). The two disadvantage variables do not have this ambiguity, with economic one concerning the admittedly focus concern of maintaining public pensions (v41) and the other about EU interference in internal Danish conditions (v44). For all the independent variables the respondents were asked to rate their levels of agreement. For the sake of simplicity dummy variables were created for all three, with the two levels of agreement combined into one and the same being done for disagreement responses, with the neutral and unsure responses marked as missing for the sake of SPSS’ analysis. Thus, only 629 cases were used in the regression model, which is: $\text{logit}(\pi) = 1.628 + 2.373X_{v37D} - 2.332X_{v41D} - 2.139X_{v44D}$. With a χ^2 value of 425.441 with $df = 3$ and a significance $< .001$, a -2 Log Likelihood of 441.723, and an R^2 value of .657 there is strong evidence that the null hypothesis is not true and the voting variable (v4) is dependent upon the three independent variables. Likewise the Wald values provide further support of this.

SPSS Output

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	236.829	1	.000
	Block	236.829	1	.000
	Model	236.829	1	.000
Step 2	Step	107.572	1	.000
	Block	344.401	2	.000
	Model	344.401	2	.000
Step 3	Step	81.040	1	.000
	Block	425.441	3	.000
	Model	425.441	3	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	630.335(a)	.314	.419
2	522.763(b)	.422	.564
3	441.723(b)	.492	.657

a Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

b Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	v44D(1)	-2.820	.211	179.335	1	.000	.060
	Constant	.970	.121	64.153	1	.000	2.638
Step 2(b)	v37D(1)	2.406	.256	88.398	1	.000	11.094
	v44D(1)	-2.492	.233	114.399	1	.000	.083
	Constant	.110	.146	.563	1	.453	1.116
Step 3(c)	v37D(1)	2.373	.274	74.936	1	.000	10.730
	v41D(1)	-2.332	.282	68.241	1	.000	.097
	v44D(1)	-2.139	.255	70.492	1	.000	.118
	Constant	1.628	.262	38.730	1	.000	5.092

a Variable(s) entered on step 1: v44D.

b Variable(s) entered on step 2: v37D.

c Variable(s) entered on step 3: v41D.

Bibliography

- EF-Gallup 1972*. Primærundersøger: Hans Jørgen Nielsen m.fl. DDA-006, 2. udgave (ved Erik Skovfoged, Astrid Bogh Lauritzen, Jens Wagner og Per Nielsen). Odense, Dansk Data Arkiv 1982. Codebook translated by Mads Gregersen.
- van der Eijk, Cees, Mark N. Franklin, and Michael Marsh. 1996. 'What Voters Teach Us About Europe-Wide Elections: What Europe-Wide Elections Teach Us About Voters'. *Electoral Studies* **15**:2. pp.149-166.
- EUROafstemningen, 2000*. Primærundersøgere: Torben Worre og Hans Jørgen Nielsen. DDA-4013 1. udgave (ved Henning Lauritsen, Heidi Wittendorff Sørensen og Jens Wagner). Odense, Dansk Data Arkiv 2003. Codebook translated by Ari Helgason.
- Folkeafstemningen om Edinburghaftalen, 18. maj 1993*. Primærundersøgere: Karen Siune, Ole Tonsgaard og Palle Svensson. DDA-1784, 1. udgave (ved Jette Strand Madsen og Birgitte Grønland Jensen). Odense, Dansk Data Arkiv 2000. Codebook translated by Ari Helgason.
- Folkeafstemningen om EF-pakken, 27. februar 1986*. Primærundersøgere: Ole Borre, Hans Jørgen Nielsen, Steen Sauerberg og Torben Worre. DDA-1192, 1. udgave (ved Ralph Bjørn Eriksen og Per Nielsen). Odense, Dansk Data Arkiv 1986. Codebook translated by Ari Helgason.
- Folkeafstemningen om Maastrichtaftalen, 2. juni 1992*. Primærundersøgere: Karen Siune, Ole Tonsgaard og Palle Svensson. DDA-1743, 1. udgave (ved Birgitte Jensen og Søren Hviid Pedersen). Odense, Dansk Data Arkiv 1999. Codebook translated by Ari Helgason.
- Franklin, Mark N. 2002. 'Learning from the Danish case: A comment on Palle Svensson's critique of the Franklin thesis'. *European Journal of Political Research* **41**:6. pp.751-757 .
- Franklin, Mark N., Cees van der Eijk, and Michael Marsh. 1995. 'Referendums Outcomes and Trust in Government: Support for Europe in the Wake of Maastricht'. *West European Politics* **18**. <<http://www2.trincoll.edu/~mfrankli/ReferendumTrust.pdf>>. Accessed 2006-02-28.
- Gallagher, Michael and Pier Vincenzo Uleri, eds. 1996. *The Referendum Experience in Europe*. Basingstoke: Macmillan.
- Gary, John et al. 2005. "'Second-order" versus "Issue-voting" Effects in EU Referendums: Evidence from the Irish Nice Treaty Referendums'. *European Union Politics* **6**:2. pp.201-221.
- Hug, Simon. 2002. *Voices of Europe: Citizens, Referendums, and European Integration*. London: Rowman & Littlefield.
- Lawler, Peter. 1997. 'Scandinavian Exceptionalism and European Union'. *Journal of Common Market Studies* **35**:4. pp.565-594.
- Leduc, Lawrence. 2002. 'Opinion change and voting behaviour in referendums'. *European Journal of Political Research* **41**:6. pp.711-732.

- Mendelsohn, Mathew and Fred Cutler. 2000. 'The Effect of Referendums on Democratic Citizens: Information, Politicization, Efficacy and Tolerance'. *British Journal of Political Science* **30**:4. pp.685-701.
- 'National accounts and balance of payments'. *Statistical Yearbook 2000*. Statistics Denmark. <<http://www.dst.dk/HomeUK/Statistics/ofs/Publications/Yearbook/2000.aspx>>. Accessed 2006-04-20.
- Powell, G. Bingham, Jr., Guy D. Whitten. 1993. 'A Cross-National Analysis of Economic Voting: Taking Account of the Political Content'. *American Journal of Political Science* **37**:2. pp.391-414.
- Qvortup, Mads. 2002. *A comparative study of referendums: government by the people*. Manchester, New York: Manchester Univ. Press.
- 'Referendum of the 28 September 2000 on Denmark's Participation in the Common Currency'. Danish Ministry of the Interior and Health. <<http://www.im.dk/publikationer/fv20nov2001/28sept2000.pdf>>. Accessed 2006-02-03. p.7.
- Reif, Karlheinz and Hermann Schmitt. 1980. 'Nine Second-Order Elections: A Conceptual Framework for the Analysis of European Election Results'. *Electoral Journal of Political Research* **8**:1. pp.3-45.
- Royed, Terry J. et al. 2000. 'Is "Clarity of Responsibility" Important for Economic Voting? Revisiting Powell and Whitten's Hypothesis'. *British Journal of Political Science* **30**:4. pp.669-698.
- Schneider, Gerald and Patricia Weitsman. 1996. 'The Punishment Trap: "Integration Referendums as Popularity Contests"'. *Comparative Political Studies* **28**:4. pp.582-607.
- Siune, Karen and Palle Svensson. 1993. 'The Danes and The Maastricht Treaty: The Danish EC Referendum of June 1992'. *Electoral Studies* **12**:2. pp.99-111.
- Svensson, Palle. 'Denmark: the referendum as minority protection' in Gallagher and Uleri.
- Uleri. 'Introduction' in Gallagher and Uleri.
- Whitten, Guy D. and Harvey D. Palmer. 1999. 'Cross-national analyses of economic voting'. *Electoral Studies* **18**:1. pp.49-67.