

Leaving the Church: Ministers of the Church of Scotland at the 1843 Disruption

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Abstract

This article presents a dataset comprising biographical, economic and geographical data relating to Church of Scotland ministers of the early nineteenth century. Transcribed from a range of authoritative church and government publications it brings together a number of hitherto unconnected sources. This facilitates a quantitative analysis of the decisions of ministers of the Church of Scotland regarding whether to leave or remain with the Church at the time of the 1843 Disruption. In demonstrating how the dataset might be deployed to statistically model the decisions of these ministers, it enriches existing historical narratives of the most important domestic event in Scotland during the nineteenth century.

Keywords

church – Scotland – 1843 – linear probability model

Related Data Set

Parish Ministers of the Church of Scotland, 1843, deposited at: DOI 10.5255/UKDA-SN-857235 in repository UK Data Service.

1. Introduction

On 18 May 1843 a historic schism, known as the “Disruption”, fractured the Church of Scotland. On that day a group of ministers, opposed to the intrusion of the state into ecclesiastical matters, dramatically walked out of the Church’s annual General Assembly meeting. Led by the Rev Dr Thomas Chalmers they signed a document signalling their intent to leave the established Church, and with it all personal entitlement to salary (stipend), church and personal accommodation (manse). Out of the 1,195 clergymen of the Church of Scotland, 454

or 38.1% eventually joined the newly established Free Church of Scotland (Brown, 1982, p. 335).

In terms of its ecclesiastical, political and social impact, the 1843 Disruption was a pivotal moment in Scottish history. As Brown and Fry (1993, p. viii–ix) note,

The Disruption was the most important domestic event in Scotland during the nineteenth century. Scarcely a Scot, at home or overseas, can have been unaware of it, and many were profoundly affected in their daily lives. The course of Scottish history was permanently altered, while the ramifications spread through the United Kingdom and the British Empire.

The legal, political, social and theological aspects of the event have attracted substantial scholarly attention across the years.¹ However, little has been written on the factors, common across the ministerial labour force, which underpinned individual decisions of whether or not to remain in the Church of Scotland. This relative neglect stems, in part, from the lack of a comprehensive dataset, integrating key biographical, ecclesiastical and financial information relating to ministers serving the Church of Scotland in the early nineteenth century.

In this paper we address that deficit. First by describing the construction of a new dataset designed to facilitate quantitative analysis of the foundational question in studies of the Disruption: why did ministers leave the established Church to join the Free Church? Second, by illustrating the dataset's potential through deploying it in statistically modelling the 'stay or leave' decision for the entire ministerial cohort.

2. Data Sources

The factors that influenced ministers' decisions to leave the Church of Scotland were many, varied and ultimately individual. Qualitative analytical studies² have drawn many penetrating insights - relating to unquantifiable factors such as ecclesiastical leadership, social and cultural norms—from surviving personal records including diaries, correspondence, memoirs and biographies.

1 Within the existing literature contributions by Brown (1982), Cheyne (1999), Henderson (1943) and Withrington (1993) are outstanding scholarly works of the event, characterised by their breadth, rigour and balance. Amongst the most important analyses of the Disruption relating to a particular locality is MacLaren's (1974) seminal monograph examining the Disruption years in Aberdeen. It is telling, however, that the Disruption no longer features on Scottish Qualifications Agency (SQA) history examination syllabuses. See <https://www.sqa.org.uk/sqa/47923.html>

2 MacLaren (1974), as with Brown (1982), favours a qualitative analytical approach, covering unquantifiable factors such as ecclesiastical leadership, social and cultural norms. More recent scholarship by Jones (2022) draws out the important theological theme of evangelicalism in the study of the post-Disruption recovery of the Church of Scotland.

A risk inherent in this approach is the giving of undue weight to the decisions of individuals for whom the biographical records are most complete; typically leaders taking opposing sides in the debate. Consequently, the extent to which conclusions relating to the entire population may be drawn from these examples is circumscribed. In contrast, a quantitative analytical approach, whilst offering coverage of the entire population, risks casting into the shade valuable qualitative insights. This may occur through focussing too narrowly on the drawing out of empirical regularities based on summary statistics for observable and measurable phenomena such as age, location and type of church served.

In this paper we adopt the quantitative analytical approach proceeding on the assumption that observable and quantifiable phenomena materially influenced the binary choice of whether ministers adhered to the established Church or left to join the Free Church. To this end a new dataset was constructed: Parish Ministers of the Church of Scotland, 1843, deposited at source: DOI 10.5255/UKDA-SN-857235 [UK Data Service].

The dataset comprises biographical, economic and geographical data transcribed from a number of authoritative church and government publications. The unit of analysis being the individual minister, the primary data source was Scott's 1923 edition of the *Fasti Ecclesiae Scoticae*. Successive editions of this publication contain the definitive record of every minister serving within the established Church of Scotland. Each entry contains biographical information including year of birth and ordination, marital status and the names of the parishes, presbyteries and synods in which the minister served. Critically, for the purpose of this analysis, all parish ministers serving within the church on the date of the Disruption are identified, together with a record of whether or not they joined the Free Church.

Parish population data for this period were drawn from Corinne Roughley's work³ to create new Scottish parish-level map frameworks in which are delineated pre and post 1891 parish boundaries. The associated database contains parish area information matched with parish population count data drawn from each census from 1801 to 1891, allowing population densities to be calculated. For the two largest urban conurbations, Edinburgh and Glasgow, parish population data are amalgamated.⁴

3 The full dataset together with a description of its construction and content is published by the National Records of Scotland and available at: <https://www.nrscotland.gov.uk/statistics-and-data/geography/our-products/other-national-records-of-scotland-nrs-geographies-datasets/historic-civil-parishes-pre-1891> [Consulted 4 April 2024]

4 In these the parish areas within the city, boundaries were subject to significant change during the early nineteenth century and the correspondence between parish population and parish church was unstable. In Edinburgh for example, the single city parish was served by fifteen churches staffed by eighteen ministers. It was common for individuals to work and attend church outwith the parish area in which they lived.

Data relating to ministerial stipend and church type were derived from three Parliamentary Papers: the *Ninth Report by the Commissioners of Religious Instruction, Scotland*, the 1850 *Churches (Scotland)* and the 1866 *Parish Ministers (Scotland)* Parliamentary returns. These record ministerial stipends, which for the majority of the clergy were paid by the holders of teinds (tithes), by voluntary donations, or by town and city magistrates. Within the Parliamentary returns each church is identified as belonging to one of three categories, quoad omnia parish churches, quoad sacra churches and city or burgh churches.

Quoad omnia churches, the majority, served parishes whose historic boundaries delineated areas within which ecclesiastical and civil jurisdiction coincided. Quoad sacra churches were those where ecclesiastical jurisdiction had been separated from the civil in order to meet the religious needs of a growing population. Between 1834 and 1841 a church extension campaign, led by Chalmers,⁵ established over 200 of these new quoad sacra churches in Scotland's rapidly growing urban areas. Finally, city or burgh churches were those located in the largest towns and cities where responsibility for funding the provision and maintenance of the church building and associated ministerial stipend rested with the civic authorities.

3. Data: Analysis

Preliminary to deploying the dataset in modelling the binary choice made by ministers of the Church of Scotland at the Disruption, we explore some of its key features revealed through aggregate level descriptive statistics.

Table 1 presents summary statistics for the three key continuous variables – age, stipend and parish population density – for the entire dataset. Figures 1.1 to 1.3 present their distributions, with Figure 1.4 using a logarithmic scale to delineate more clearly population density. Ministerial ages ranged from 22 to 94, with a mean of just over 49 years. For stipend, of the 33 ministers enjoying stipends in excess of £400 p.a., twenty-one served

TABLE 1: Summary Statistics Continuous Variables (Aggregated)

Variable	Observations	Min	Max	Mean	Std Dev
Age (years)	1161	22	94	49.18	13.83
Stipend (£) per annum	1195	50	548.22	216.89	73.87
Parish Population Density (people per km ²)	1195	1.86	3735.65	330.30	780.43

5 See Brown (1982) and Brown (1978).

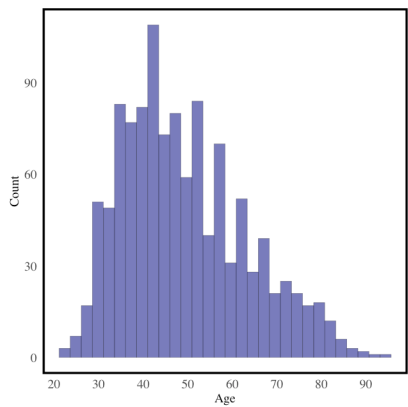


FIGURE 1.1: Distribution of Continuous Variables Age.
Age (years)

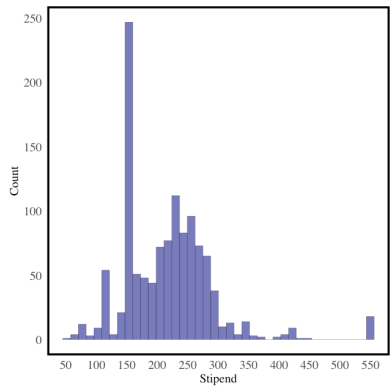


FIGURE 1.2: Distribution of Continuous Variables Stipend.
Stipend (£) per annum

churches in the city of Edinburgh, ten served in Glasgow, one in Aberdeen and one in St Andrews. The highest stipends of just over £548 p.a. were all earned by ministers of Edinburgh’s prestigious burgh churches. At the other end of the spectrum the twenty ministers on the lowest stipends of under £100 p.a., although poorly paid in comparison, would generally be able to secure modest local supplements. Or, in the case of rural parishes, they would receive additional income from a glebe, either through produce grown or rent. The most densely populated areas were the large cities, with Glasgow and Greenock having the highest recorded population density of over 3,000 people per square kilometre.

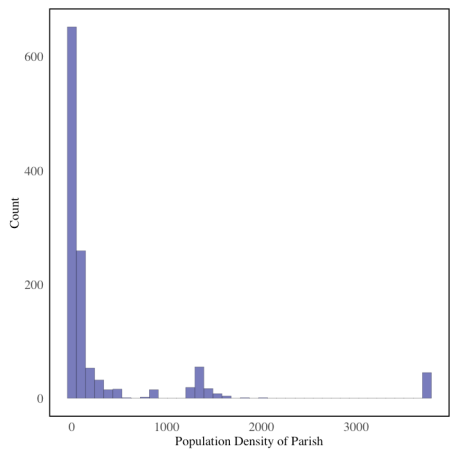


FIGURE 1.3: Distribution of Continuous Variables Population Density.
Parish Population Density (people per km²)

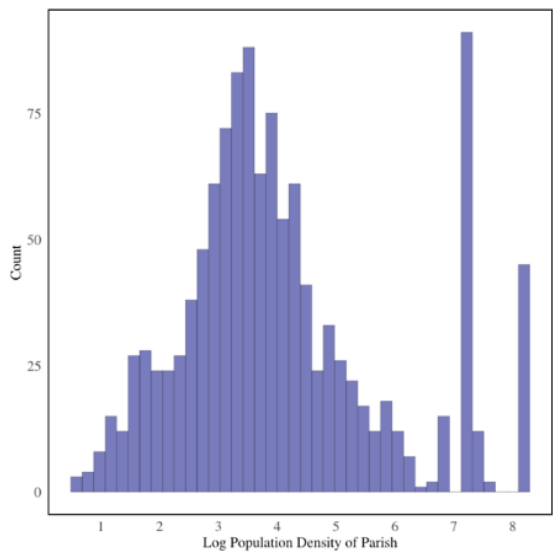


FIGURE 1.4: Distribution of Continuous Variables Log Population Density.
Natural log Parish Population Density (people per km²)

Table 2 presents summary statistics based on data disaggregated according to whether a minister remained in the Established Church or joined the Free Church. Notable is the lower mean age of those joining the Free Church and the higher mean population density of their parishes. For stipend, the range and mean are similar. In Table 3 the count of those married, serving quoad sacra

TABLE 2: Summary Statistics Continuous Variables (Disaggregated)

Variable	Remained in Established Church					Joined Free Church				
	Obs	Min	Max	Mean	Std Dev	Obs	Min	Max	Mean	Std Dev
Age (years)	722	22	94	51.94	14.26	434	23	84	44.50	11.73
Stipend (£) per annum	722	50	548.22	216.75	65.96	434	70	548.22	218.73	86.12
Parish Population Density (people per km ²)	722	1.98	3745.65	199.23	582.05	434	1.86	3745.65	523.41	950.66

TABLE 3: Summary Categorical Variables (Disaggregated)

	Remained in Established Church	Joined Free Church
Married	459 / 719 (63.8%)	270 / 434 (62.2%)
Quoad Sacra Minister	47 / 722 (6.5%)	77 / 434 (17.7%)
Burgh Minister	65 / 722 (9.0%)	58 / 434 (13.4%)

and burgh churches is recorded. As a proportion of the disaggregated data it is notable that a much greater number of ministers in quoad sacra churches joined the Free Church. A similar, but less pronounced, pattern is true for the burgh churches, however there is little difference in the proportions of those married on the date of the Disruption.

Turning to the geographical contours of the ministerial exodus, Tables 4 and 5 list the Synod and Presbytery areas respectively. Figure 2 offers a visual analysis of the proportion of ministers joining the Free Church by presbytery area. Aggregating individual ministerial data at presbytery level and looking at the two ends of the distribution, we note a geographical variaton. Amongst the twenty presbyteries with the highest percentage of ministers remaining in the Church of Scotland just under half were in the south of the country. Amongst the twenty presbyteries with the highest percentage of ministers joining the Free Church of Scotland half were located above the Highland line.

4. Empirical Modelling and Results

The decision of ministers either to adhere to the Established Church or to leave and join the Free Church was ultimately an individual and personal one. Nonetheless, the aim of the empirical analysis is to identify those observable

TABLE 4: Synod Areas

Synod	Number	Synod	Number
Aberdeen	1	Lothian and Tweeddale	9
Angus and Mearns	2	Merse and Teviotdale	10
Argyll	3	Moray	11
Dumfries	4	Orkney	12
Fife	5	Perth and Stirling	13
Galloway	6	Ross	14
Glasgow and Ayr	7	Shetland	15
Glenelg	8	Sutherland and Caithness	16

characteristics across the ministerial population on which quantitative data is available, which have greatest explanatory power in terms of the choice made.

Given a choice variable—joined Free Church—which is inherently binary, a linear probability modelling framework is selected to analyse the decisions of individual ministers. The standard linear probability model (LPM) deployed is a linear multiple regression model applied to a binary dependent variable.

Thus

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_k X_{ki} + u_i$$

Where Y is the binary dependent variable and $E(Y | X_1, X_2, \dots, X_k) = \Pr(Y=1 | X_1, X_2, \dots, X_k)$.

Hence,

$$P(Y=1 | X_1, X_2, \dots, X_k) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k$$

An LPM modelling approach uses ordinary least squares to estimate regression coefficients, with the conventional heteroskedastic-robust OLS standard errors used to derive confidence intervals.⁶ Table 6 records the results. The binary

6 A Linear Probability Model (LPM) using Ordinary Least Squares (OLS) estimation was the main specification for modelling the decision to leave the Church of Scotland. The LPM is a more straightforward modelling approach for modelling probabilities than logit or probit models. The coefficients directly represent the independent variables’ marginal effects, simplifying interpretation. While the LPM does not strictly guarantee that predicted probabilities lie within the unit interval, it provides a linear approximation of the conditional expectation function. For our study, the marginal effects estimated by the probit model were very similar to those of the LPM. This suggests that the potential non-linearity captured by the probit model did not significantly alter the core interpretations.

TABLE 5: Presbytery Areas

Presbytery	Number	Presbytery	Number
Aberdeen	1	Lewis	42
Alford	2	Locharron	43
Deer	3	Skye	44
Ellon	4	Uist	45
Fordyce	5	Biggar	46
Garioch	6	Dalkeith	47
Kincardine O'Neil	7	Dunbar	48
Turriff	8	Edinburgh	49
Arbroath	9	Haddington	50
Brechin	10	Linlithgow	51
Dundee	11	Peebles	52
Fordoun	12	Chirnside	53
Forfar	13	Dunse	54
Meikle	14	Jedburgh	55
Dunoon	15	Kelso	56
Inverary	16	Lauder	57
Isla and Jura	17	Selkirk	58
Kintyre	18	Aberlour	59
Lorn	19	Abernethy	60
Mull	20	Elgin	61
Annan	21	Forres	62
Dumfries	22	Inverness	63
Langholm	23	Nairn	64
Lochmaben	24	Strathbogie	65
Penpont	25	Cairston	66
Cupar	26	Kirkwall	67
Dunfermline	27	Northern Isles	68
Kirkcaldy	28	Auchterarder	69
St Andrews	29	Dunblane	70
Kirkcudbright	30	Dunkeld	71
Stranraer	31	Perth	72
Wigtown	32	Stirling	73

TABLE 5: (Continued)

Presbytery	Number	Presbytery	Number
Ayr	33	Weem	74
Dumbarton	34	Chanonry	75
Glasgow	35	Dingwall	76
Greenock	36	Tain	77
Hamilton	37	Burravoe	78
Irvine	38	Lerwick	79
Lanark	39	Caithness	80
Paisley	40	Dornoch	81
Abertarff	41	Tongue	82

TABLE 6: Linear Probability Models

	Model 1	Model 2	Model 3 (with Presbytery Location Controls)
Intercept	0.952*** (0.229)	0.583* (0.270)	0.784* (0.328)
Age	-0.008*** (0.001)	-0.008*** (0.001)	-0.009*** (0.001)
Log Stipend	-0.0812* (0.0441)	-0.009 (0.051)	-0.022 (0.056)
Log Population Density	0.059*** (0.008)	0.048*** (0.009)	0.047** (0.015)
d Married	0.009 (0.028)	0.011 (0.028)	0.005 (0.027)
d QSacra		0.184*** (0.051)	0.110* (0.054)
d Burgh		0.043 (0.049)	0.029 (0.051)
Number of observations	1152	1152	1152
R ²	0.108	0.119	0.239
Adjusted R ²	0.105	0.115	0.177

Notes: Cells contain estimated coefficients and, in parentheses, the associated heteroscedastic-robust standard errors. Heteroscedastic-robust standard errors. *p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001.

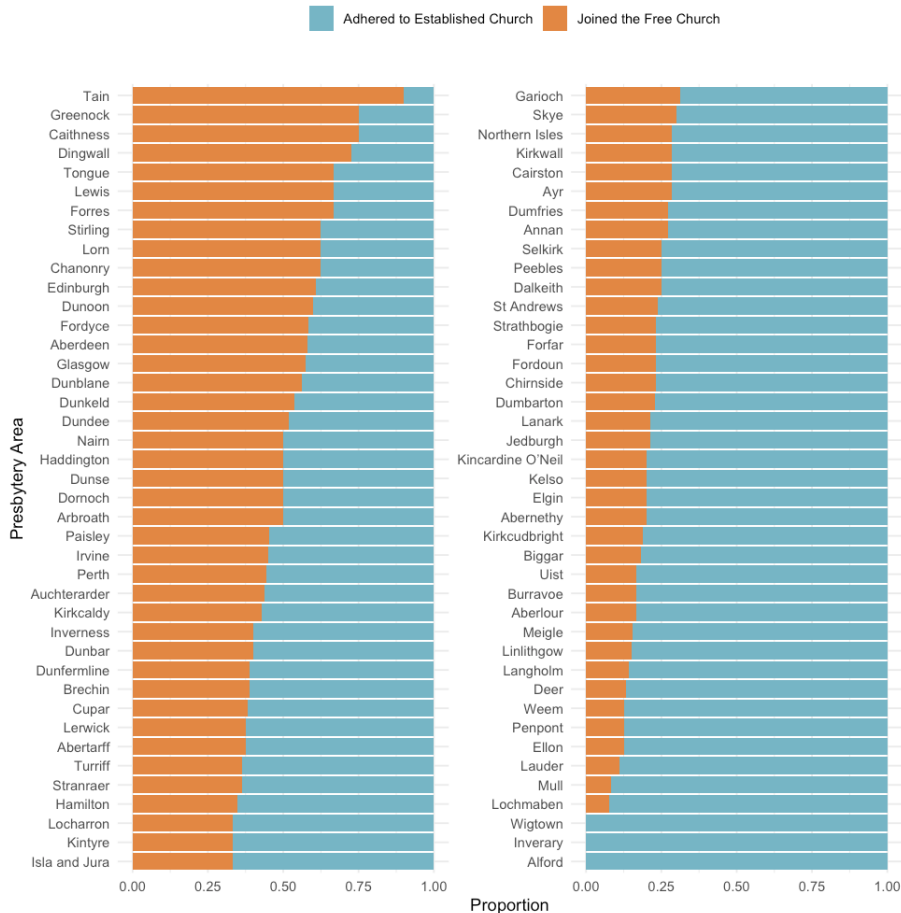


FIGURE 2: Proportion of Ministers Adhering to the Established Church and Joining the Free Church by Presbytery.

dependent variable takes the value of one in the cases where a minister joined the Free Church.

Models 1 and 2 include variables relating to age, stipend and population density, with the former having just one dummy variable relating to marital status, and the latter adding in dummies relating to church type. Model 3 adds presbytery location controls (dummy variables) to the specification.⁷

⁷ As part of the modelling process a robustness check was carried out through implementing an alternative nonlinear probit regression model to re-estimate marginal effects. The results of this were similar however, and it was therefore concluded that the benefits of capturing non-linearity with the probit did not outweigh the advantages of simplicity and interpretability offered by the LPM. Results available from the authors.

The results may be summarised as follows. Age has a negative, statistically significant, and consistent coefficient across all models, implying that younger ministers had a greater propensity to join the Free Church. In addition, both log Population Density and the Quoad Sacra dummy variables have positive and significant coefficients across model specifications. In contrast, the coefficient on log Stipend, whilst consistently negative, is only significant at the 10% level in the first model and does not therefore present as a key driver of the decision to leave. Neither are the Married nor Burgh designations. The results are consistent, therefore, with hypotheses suggesting a higher probability of joining the Free Church for younger ministers, those serving quoad sacra churches and those located in parishes with a high density of population. In contrast, neither the level of stipend nor marital status have significant explanatory power within the model.

These results are consonant with Brown's (1982) analysis in which he noted the greater tendency of young ministers serving in unendowed quoad sacra churches to join the Free Church. This, he linked to the rise of the Evangelical party within the Church of Scotland during the 1830s and early 1840s, led by Chalmers, noting, "younger men, ordained to the ministry during the years of Evangelical ascendancy, had a greater tendency to go out." (Brown, 1982, p. 335). Furthermore, the concentration of seceding ministers in the quoad sacra churches may be explained by the fact that ministers ordained during the 1830s would have been seeking their first clerical appointment at the time of Chalmers's church extension campaign, which succeeded in establishing large numbers of quoad sacra churches.

The new quoad sacra churches, funded through voluntary contributions, were located in areas of high population density, the larger towns and cities. In these areas, the fear of economic insecurity through loss of stipend for ministers joining the Free Church,⁸ would have been attenuated in two ways. First, if it were believed that significant latent capacity to raise money through voluntary giving existed. Second, a further feature of urban areas was the greater availability of accommodation, both public halls and private houses, that might be rented or purchased to meet the needs of seceding congregations and ministers in the short run. In the rural areas, in contrast, there were not only fewer suitable buildings, there was also a greater concentration of control over buildings and land in the hands of a relatively small number of individuals. It was therefore possible for hostile landowners to effectively deny access to those it wished to exclude. Thus, whilst loss of stipend was clearly a concern for ministers, most especially those married with families, more critical was the context

8 MacLaren (1974), 56, notes, for example, how the fear of economic insecurity through loss of stipend might act to deter those considering withdrawing from the Establishment.

within which this took place. Or to put it more plainly, the risk to economic security was potentially greater in the rural rather than the urban areas.⁹

It is important to note, however, the limits of this modelling approach in capturing the key dimensions of an individual decision shaped by many factors. Perhaps most critical is the unquantifiable effect of doctrinal or theological disposition, which varied across the country. Whilst variation in theological outlook might be picked up through the use of location controls in the modelling, potential remains to move beyond the limits of the current approach to tease out further the complex interaction between theology, economics and geography.

5. Conclusion

In conclusion, we return to the foundational question of the Scottish Disruption: why did ministers join the Free Church? In deploying a new database, and modelling the binary choice of ministers, the results of this paper affirm the importance of age, type of church served and geographical context in explaining the pattern of secession. In addition, they cast doubt on theories offering explanations which elevate the role of narrow economic concerns in driving the decision; explanations focusing on the impact of loss of stipend or family circumstances. These insights are of relevance to studies analysing the motives for church secession and church formation beyond the confines of Scotland. In this context however, the way now stands open to use the dataset for further work. Future research could explore how various dimensions of the context within which individual ministers lived and worked affected their decision to adhere to the establishment or join the Free Church of Scotland.

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⁹ Brown, T. (1893) for a rich description of the experience of ministers serving urban and rural parishes at the time of the Disruption.

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Appendix

Data Sources and Variable Derivation

Data Category Description	Variable Name	Source: Variable Derivation
Biographical		
Name	-	Fasti: Minister's name
Age	Age	Fasti: Calculated as 1843 – year of birth
Joined Free Church	-	Fasti: Dependent variable, 1 = joined Free Church
Marital Status	d Married	Fasti: Dummy variable, 1 = married (not widower) and spouse alive on 18 May 1843
Economic / Geographical		
Parish	-	Fasti: Parish name
Synod Area	d Synod	Fasti: Categorical variable coded 1 – 16.
Presbytery Area	d Presb	Fasti: Categorical variable coded 1-82
Quoad Sacra Church	d QSacra	PP 1839: Dummy variable, 1 = Quoad Sacra Church
Burgh Church	d Burgh	PP 1866: Dummy variable, 1 = (Royal) Burgh Church
Stipend	Stipend	PP 1839, PP 1850: Stipend (converted from £sd to £decimal)
Population Density	Population Density	Anderson and Roughley: Parish population density per square km for census year 1841.

Sources (Abbreviations)

Anderson and Roughley:	Anderson, M. and Roughley, C., 2018. Scotland's Populations from the 1850s to Today, Oxford University Press, Oxford.
Fasti	Scott, Hew, (ed) 1923. Fasti Ecclesiae Scoticae. The succession of ministers in the Church of Scotland from the Reformation. Volumes 1 - 8. Oliver and Boyd, Edinburgh.
PP 1839	Parliamentary Papers 1839, Ninth Report by the Commissioners of Religious Instruction, Scotland. W. & A.K. Johnston, Edinburgh.
PP 1850	Parliamentary Papers 1850, Churches (Scotland), 311.
PP 1866	Parliamentary Papers 1866, Parish Ministers (Scotland), 117.
McCosh	James McCosh 1843, The Wheat and Chaff Gathered into Bundles; a statistical contribution towards the history of the recent disruption of the Scottish ecclesiastical establishment, Perth.

Notes

Biographical Information

The names, ages, marital status of ministers, together with their decision whether or not to join the Free Church are taken from Fasti 1923.

Included are those ordained and admitted to a parochial charge.

Excluded are Missionaries and Ministers in university appointments (whose working and remuneration arrangements differed from those of parish ministers), Assistant and Successor ministers (only the senior minister within a particular parish is included).

Economic / Geographical Information

The names of parishes, presbytery and synod area are taken from Fasti 1923.

Designations as a Burgh or Quoad Sacra church are taken from PP 1839 and PP 1866.

Stipend data taken from PP 1839 and PP 1850.

Parish population density figures (persons per square kilometre) are taken from National Records of Scotland: <https://www.nrscotland.gov.uk/statistics-and-data/geography/our-products/other-national-records-of-scotland-nrs-geographies-datasets/historic-civil-parishes-pre-1891> [Consulted 4 April 2024]. See also Anderson and Rougley 2018.

Modelling Assumptions

Dummy Variables, denoted d , are binary categorical variables taking values of 1 or 0.

Parishes noted in Fasti 1923 as vacant on 18 May 1843 are excluded.

For Edinburgh and Glasgow, parish population density figures used are the mean populations densities across the respective cities.

Stipend of the closest neighbouring parish are used in cases where stipend observations are missing.