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Agricultural Prices in Scotland 1826–1974: County Level Data

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Abstract

This article presents a dataset comprising Scottish agricultural prices for the period 1826–1974. The data are derived from an archived source in which prices set at meetings of courts held across each of Scotland's 32 historic counties were recorded. The courts, convened by county sheriffs, met once a year to gather evidence relating to county-wide prices for crops grown within each locality. Once set, the prices were used, primarily, to determine the annual stipends of the clergy of the established Church of Scotland. Prices varied according to crop variety and quality, with some counties setting up to three prices in any one year for one type of grain. The most widely grown crop was oatmeal, with wheat, peas and barley also extensively farmed. The system operated without interruption until the abolition of the 'fiars' courts in 1974. The dataset opens two key areas of research. First it enables the further development of analyses of the integration and operation of Scottish regional grain markets in the nineteenth and early twentieth centuries. Second it facilitates empirical analyses of the operation of the clerical labour market in Scotland for which long runs of stipend (wage) data collected on a consistent basis are required.

Keywords

agriculture - prices - Scotland - church - stipend

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Related data set "Teind Court Register of Fiars' Prices: Scotland, 1826–1974"
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1 Introduction

The development and integration of markets has long been recognised as an important driver of economic growth in economies undergoing a process of industrialisation (Chilosi et al., 2013; Federico, 2011; Persson & Sharp, 2015). Empirical studies have frequently deployed regional grain price time-series data in analysing, for example, the evolution of national markets (Bateman, 2011; Gras, 1915), patterns of production¹ (Olson & Harris, 1959) and the phenomenon of inflation (Blakeway, 2015; Gemmill & Mayhew, 1995). Work to refine and supplement existing datasets continues to extend the terrain over which researchers are able to operate, broadening the set of questions amenable to empirical analysis (Brunt & Cannon, 2013; Solar & Klovland, 2011).

Although few in number, and separated by several decades, a handful of important empirical studies drawing on regional (county level) data to analyse the development and integration of grain markets in Scotland have been published. Early work by Mitchison (1965) used the relative movement of seventeenth and eighteenth century county grain prices to give insight into the development of a unified market in Scotland. Thirty years later the conclusions of this work were revised and the analysis extended, by Gibson and Smout's landmark studies (1995a, 1995b) which drew on extensive archival research to construct long price time-series covering the period 1550 to 1780. Most recently Cassidy and Hanley (2020), building directly on the foundations of Mitchison, Gibson and Smout, advanced the work by deploying the latest quantitative techniques in testing for price convergence and market efficiency using grain prices again from the seventeenth to the end of the long eighteenth century (1815). All these studies used Scottish county fiars price data.

This article, and associated agricultural price dataset, enables the extension of previous analytical work beyond the late eighteenth century, covering a later period (1826–1974) for every county within Scotland.

¹ For example: the geographical distribution of the cultivation of particular grains, changes to the mix of grains grown in particular county areas over time and the extent to which farming specialisation advanced across the country.

2 Problem

The central problem, and key limitation confronting researchers analysing the development and integration of markets, is the availability of long, consistently constructed, time-series. In Scotland the longest, and most geographically comprehensive price datasets deployed for these purposes are those assembled from legal records at county level.

From the mid sixteenth to the late twentieth century Scottish sheriffs convened courts on an annual basis to determine or 'strike' the price of various grains grown within their county. These prices were known as county 'fiars'. The earliest surviving fiars prices date back to 1556, and relate to bear (barley) and oatmeal prices in the county of Fife.

The purpose for which fiars prices were originally used was the calculation of the monetary value of Crown and church rents, duties and clerical stipends which were set in terms of fixed quantities of particular grains. During the seventeeth and eighteenth centuries the practice of sheriffs holding annual fiars court hearings extended across the country. Although procedure in each county court varied, it was commonly the case that a jury was convened to receive evidence on prices realised at a particular time of year.

By the early nineteenth century the primary use of county fiars had become the fixing of church ministers' stipends (Elliot, 1879, 1886, 1890). Under the Teinds Act 1808 the practice of making stipend payment to ministers in victual (in kind) was abolished in favour of payment in money. This required a price to be struck enabling stipends expressed in quantities of victual to be converted into monetary payments. Ministerial stipends therefore rose and fell with agricultural prices in the county in which they served (Sawkins, 2022). A statutory requirement (Act of Sederunt of 5th July 1809) required an annual return of county fiars prices to be made to the Clerk of Teinds in the Teind² Office in Edinburgh. This ingathering of information from across the country for the first time revealed the extent of the variation in practice, which Paterson (1852, p. 4) noted to be, "different, inconsistent and contradictory", with the methods of striking fiars themselves, "loose, inefficient and incorrect."

The main differences in practice related to weights and measures, timing and valuation practice for varieties of grain.

Prior to the passing of legislation in 1824 (5 Geo IV. Cap 74) promoting the general adoption of the imperial system, counties were at liberty to adopt different standard weights and measures. It was therefore not until another

² In Scotland the word 'teind' refers to the tithe (or 'tenth'), which was an ancient burden on land owners for the support of the clergy of the established Church.

statute was passed (5&6 William IV, c49) that, from the start of 1826, local custom and practice finally gave way to a nationally prescribed approach, a process which took several years to embed. On timing, county sheriffs were at liberty to convene hearings to strike fiars prices in different months of the year. Most took place from early February to the middle of March, however in Orkney and Shetland, for example, fiars were traditionally struck in May. Finally, on valuation, different counties valued different types of grain, with some having one price per type of grain and others having different prices for different qualities of the same grain.

The inconsistency in practice persisted. A 1911 Report of the Committee on Fiars Prices in Scotland noted:

Besides the lack of uniformity, the evidence of the agricultural bodies and of the representatives of the ministers shows that there are several points, some of them applicable to only a few counties, others more general, in which the present practice is open to grave objection. Among these are, (1) the composition of the jury, (2) insufficient quantity of evidence, (3) unnecessary burden of attendance on jurors and witnesses, (4) limitation of the evidence to too short a period of the year, (5) acceptance of evidence without a schedule of particulars, (6) want of opportunity to examine the schedules, (7) inaccurate method of calculating the Fiar of meal, (8) calculation of the Fiars by prices alone, instead of by quantities and prices, (9) acceptance of evidence of prices which include cost of carriage, (10) calculation by an artificial standard of weight instead of by the natural weight of the bushel. Under each of these heads there is evidence in one county or another of serious error.

COMMITTEE ON FIARS PRICES IN SCOTLAND, 1911, p. 6

These were a particular source of frustration and concern to those with a vested interest in the system; namely ministers of the established Church of Scotland (Parliamentary Papers, 1834, 1837–38, 1896). Throughout the nineteenth and early twentieth century they lobbied for reform, however the system remained in place until county fiars courts were finally abolished under Section 28 (1) of the Local Government (Scotland) Act 1973.

Despite these lacunae the fiars price time series are attractive to scholars, having been made accessible to researchers, most notably through the work of Flinn et al. (1977) and Gibson and Smout (1995a), which, taken together, covered the mid sixteenth to the early nineteenth centuries. Aware that variations between counties of the way in which the fiars were struck undermined their

usefulness as a guide to the actual prices at which grains were traded Gibson and Smout concluded nevertheless that,

...there was generally an admirable correlation between the trends or fluctuations shown by the fiars and by known market transactions from manuscript accounts. Clearly the fiars must be used with some caution, but as a general guide to the movement of grain prices in early modern Scotland they are, to use Mitchison's words 'an adequate tool for the historian' and are undoubtedly without parallel with respect to their coverage of the country.

GIBSON & SMOUT, 1995a, p. 77

Extending the available run of fiars data by a century and a half solves the problem of truncated agricultural price time series, thereby enabling analyses of the integration and development of markets to run from the early nineteenth to the late twentieth century.

3 Data

- Teind Court Register of Fiars' Prices: Scotland, 1826–1974, deposited at source – DOI:www.doi.org/10.5255/UKDA-SN-855963
- Temporal coverage: 1826-1974

The dataset presented in this article extend by over a century, the published fiars prices. The *Teind Court Register of Fiars' Prices: Scotland, 1826–1974* comprises a transcript of a single manuscript volume, the *Teind Court Register of Fiars' Prices*, held by the National Records of Scotland (National Records of Scotland, 1826–1974).

Entries from the original Register, for example the one shown in Figure 1, were transcribed into a series of Excel spreadsheets, independently checked and verified against the original. The dataset is held in the UK Data Service ReShare archive (https://reshare.ukdataservice.ac.uk/) under the reference 10.5255/UKDA-SN-855963 (Sawkins & Smith, 2022).

For each historic county of Scotland in which Fiars Courts were held a single Excel workbook records prices as they appear in the manuscript *Register*. Each county workbook consists of two sheets, named "£sd" and "Decimal". The sheet named "£sd" shows prices as they appear in the manuscript Register, namely in pre-decimal currency of pounds (£), shillings (s) and pence (d) for 1826–1969, and in decimal currency of pounds (£) and pence (p) for 1970–1974. The sheet

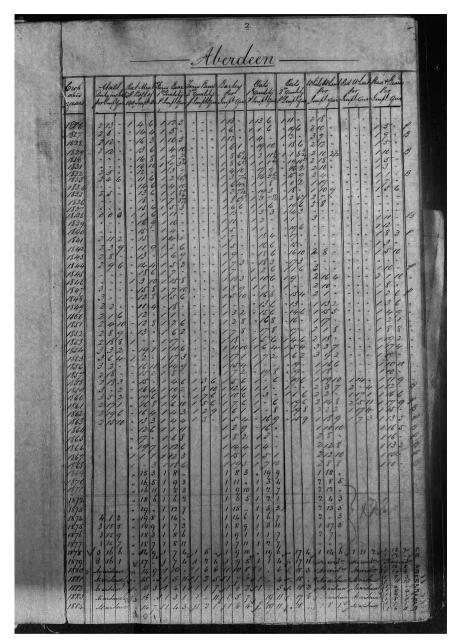


FIGURE 1 Image of Manuscript Record for the County of Aberdeenshire
NATIONAL RECORDS OF SCOTLAND, EDINBURGH, TE 18/11, P. 2.

named "Decimal" shows, instead, decimal equivalents rounded to 4 decimal places. For example £1 7s 3^3 4d converts to £1.3656. The period covered runs from 1826 to 1974; from the general introduction of imperial weights and measures to the abolition of fiars courts.

Each worksheet shows annual prices by crop (wheat, peas, potatoes etc) for a single county. The only crop recorded as being priced at some point during the period of study in every county was oat meal. In the majority of counties more than one price was recorded for barley, oats and wheat. These prices reflected either different qualities of grain – generally 'first' and 'second' quality, and in the richer farming areas of the south east of Scotland, such as Edinburghshire (Midlothian), Haddingtonshire (East Lothian) and Peeblesshire, 'first', 'second' and 'third' quality – or different local varieties. Prices for potatoes were struck in just two counties, Kirkcudbrightshire and Wigtownshire.

The *Register* generally adopted the imperial system of weights and measures, but different measures were used for different crops and by different counties. The 'imperial quarter', a unit of dry volume equal to 64 imperial gallons, was deployed extensively. Being a unit of dry volume its weight varied between grains and across years reflecting both grain density and climatic conditions prevailing during a growing season. The 'boll', or bowl, was also widely used being the primary unit of volume for barley, oats and wheat in some counties, but of weight (140 imperial pounds) for oat meal. More straightforwardly the weights of some grains were expressed in imperial pounds (lb) or hundredweights (cwt), with a hundredweight equivalent to 112 pounds.

Considerable inter-county variation exists in terms of the number of annual observations for different types of grain. The most complete county record is that of Haddingtonshire (East Lothian) with a full run of prices (1826 to 1974) for three qualities each of barley, oats and wheat. In other cases time series are often broken or incomplete. The general pattern is of a gradual reduction in the number of grains for which prices were recorded throughout the period; indicative of agricultural specialisation and the gradual waning of the importance of fiars prices and court processes. Thus in Dumfriesshire ten individual grain prices were struck in 1828, this had reduced to five in 1928, two in 1972 and none thereafter.

Table 1 summarises, by county, the temporal coverage and the agricultural produce valued at some point during these periods.

Table 2 records the price of a boll of oat meal for four counties, chosen as representative of areas in the north, south, east and west of the country. For the north, Orkney / Shetland for 1834–1974; for the south, Peebleshire for 1841–1974; for the east, Aberdeenshire for 1826–1974; and for the west, Ayrshire for 1826–1974.

TABLE 1 County Summary of temporal coverage and and agricultural produce

County	Coverage	Grains
Aberdeenshire	1826–1973	Malt, Oat Meal, Farm Bear (1st & 2nd quality), Barley (1st & 2nd quality), Oats (1st & 2nd quality), White Wheat, Red Wheat, Pease & Beans, Wheat (1st & 2nd quality).
Argyleshire	1826–1974	Beans, Wheat, Barley, Oat Meal, Oats, Bear.
Ayrshire	1826–1974	Oat Meal, Bear, Wheat, Barley, Pease, Beans, White Corn.
Banffshire	1828–1974	Wheat, Potatoe Oats, Common Oats, Barley (1st & 2nd quality), Bear (1st & 2nd quality), Oats (1st & 2nd quality), Pease & Beans, Oat Meal.
Berwickshire	1834–1974	Wheat, Barley (Merse), Barley (Lammermuir), Oats (Merse), Oats (Lammermuir), Pease, Pease and Beans, Oat Meal.
Buteshire	1826–1974	Barley, Wheat, Bear, Oats, Oat Meal, Pease, Beans.
Caithness-shire	1830-1974	Dun Oats, Oat Meal, Bear (1st & 2nd quality), Potatoes Oats, Early Angus Oats, Oats (1st & 2nd quality), Barley (1st & 2nd quality).
Clackmannanshire	1827-1973	Wheat, Kerse Barley, Dryfield Barley, Oat Meal, White Kerse Oats, Dryfield Oats, Pease & Beans, Malt, Black Oats, Muirland Barley.
Dumbartonshire	1827–1974	Oats, Bear, Barley, Pease & Beans, Oat Meal, Wheat.
Dumfriesshire	1826–1974	Bear, Barley Malt, Rye, Beans, Wheat, Barley, White Oats, Potatoe Oats, Grey Pease, Oat Meal.
Edinburghshire (Midlothian)	1836–1974	Wheat (1st & 2nd quality), Barley (1st 2nd & 3rd quality), Oats (1st & 2nd quality), Oat Meal, Pease & Beans.

TABLE 1 County Summary of temporal coverage and and agricultural produce (cont.)

County	Coverage	Grains	
Elginshire (Moray)	1826–1974	Wheat (1st & 2nd quality), Barley (1st & 2nd quality), Oats (1st & 2nd quality), Oat Meal, Rye (1st & 2nd quality), Pease & Beans, Pease, Beans.	
Fifeshire	1827–1974	White Wheat, Red Wheat, Barley, Bear, Oats, Pease & Beans, Rye, Malt, Meal.	
Forfarshire (Angus)	1826–1974	Rye, Wheat, Barley (1st & 2nd quality), Chester Bear, Potatoe Oats, Common Oat Oats (1st & 2nd quality), Pease&Beans, Oat Meal.	
Haddingtonshire (East Lothian)	1826–1974	Wheat (1st 2nd & 3rd quality), Barley (1st 2nd & 3rd quality), Oats (1st 2nd & 3rd quality), Oat Meal.	
Inverness-shire	1829-1974	Oat Meal, White Oats, Barley (1st & 2nd quality), Wheat, Oats, Bear (1st & 2nd quality), Rye, Pease & Beans.	
Kincardinshire	1826–1974	Oat Meal, White Oats, Potatoe Oats, Bear, Pease, Barley, Wheat, Beans, Rye.	
Kinross-shire	1828–1974	Wheat, Malt, Barley (1st & 2nd quality), Bear or Begg (1st & 2nd quality), White Oats (1st & 2nd quality), Black Oats (1st & 2nd quality), Pease & Beans, Oat Meal, Rye.	
Kirkcudbright Stewartry	1834–1974	Wheat, Potatoe Oats, Common Oats, Oats, Barley (1st & 2nd quality), Bear, Oat Meal, Beans, Potatoes, Rye.	
Lanarkshire	1835–1974	Bear (1st & 2nd quality), Oat Meal (1st & 2nd quality), Oats (1st & 2nd quality), Beans (1st & 2nd quality), Pease (1st & 2nd quality), Malt, Flour, Wheat (1st & 2nd quality), Barley (1st & 2nd quality).	
Linlithgowshire (West Lothian)	1835–1974	Oat Meal, Wheat (1st & 2nd quality), Barley (1st & 2nd quality), Oats (1st & 2nd quality), Pease & Beans, Malt.	

TABLE 1 County Summary of temporal coverage and and agricultural produce (cont.)

County	Coverage	Grains
Nairnshire	1827-1974	Wheat, Barley (1st & 2nd quality), Oats, Oats with Fodder, Barley with Fodder, Oat Meal.
Orkney and Shetland	1826–1974	Malt, Oat Meal, Bear.
Peeblesshire	1834–1974	Wheat (1st 2nd & 3rd quality), Barley (1st 2nd & 3rd quality), Oats (1st 2nd & 3rd quality), Pease (1st 2nd & 3rd quality), Oat Meal (1st 2nd & 3rd quality).
Perthshire	1826–1974	Wheat (1st & 2nd quality), Barley (1st & 2nd quality), Oats (1st & 2nd quality), Pease, Pease & Beans, Rye, Oat Meal.
Renfrewshire	1830–1974	Wheat (1st & 2nd quality), Barley (1st & 2nd quality), Bear or Bere (1st & 2nd quality), Oats (1st & 2nd quality), Beans & Pease (1st & 2nd quality), Oat Meal (1st & 2nd quality).
Ross and Cromarty	1830-1974	Oat Meal, Wheat (1st & 2nd quality), Barley, Barley Meal, Oats (1st & 2nd qual- ity), Bear, Pease, Beans. Tares, Corn & Straw of Oats, Rye.
Roxburghshire	1834-1974	Wheat, Rye, Pease, Beans, Oats, Barley, Oat Meal.
Selkirkshire	1834-1974	Common Oats, Potato Oats, Oat Meal, Barley, Wheat, Pease.
Stirlingshire	1827–1974	Oat Meal, Wheat, Kerse Barley, Dryfield Barley, Malt, Pease & Beans, Kerse Oats, Muirland Oats, Dryfield Oats.
Sutherlandshire	1827-1974	Barley, Potato Oats, Oats, Oat Meal, Wheat, Pease, Beans, Bear, Rye.
Wigtonshire	1826–1972	Wheat, Barley, Bear, Potato Oats, Oats, Rye, Malt, Pease, Beans, Oat Meal, Potatoes.

TABLE 2 Oat Meal per Boll of 140 lbs Imperial Quarter

Crop and year	Aberdeen	Ayrshire	Orkney / Shetland	Peebles
1826	1.2250	1.2229		
1827	0.7167	0.7313		
1828	0.8125	0.9708		
1829	0.6750	0.8042		
1830	0.8333	0.9958		
1831	0.7417	0.7750		
1832	0.6000	0.6729		
1833	0.5750	0.6667		
1834	0.7250	0.7250	0.5750	
1835	0.6750	0.7958	0.6333	
1836	0.9000	1.1458	0.7833	
1837	0.7750	0.7104	0.6917	
1838	1.0750	1.0125	0.7750	
1839	0.8375	1.0188	0.6875	
1840	0.7500	0.8500	0.5583	
1841	0.7500	0.8271	0.6500	0.8313
1842	0.5875	0.6500	0.5000	0.6750
1843	0.6500	0.6063	0.5000	0.6760
1844	0.7167	0.7365	0.5667	0.7521
1845	0.9250	1.0333	0.6500	1.0448
1846	1.1917	1.3625	0.9458	1.4281
1847	0.7833	0.8625	0.6750	0.9031
1848	0.6333	0.7000	0.5431	0.7146
1849	0.5667	0.6313	0.5500	0.6083
1850	0.6000	0.6344	0.5250	0.6292
1851	0.6333	0.6875	0.5375	0.6906
1852	0.6500	0.7125	0.6000	0.7240
1853	1.0000	1.0208	0.8000	1.1125
1854	0.9542	0.9979	0.7583	1.0531
1855	1.1000	1.0510	0.8375	1.1708

TABLE 2 Oat Meal per Boll of 140 lbs Imperial Quarter (cont.)

Crop and year	Aberdeen	Ayrshire	Orkney / Shetland	Peebles
1856	0.8458	0.9302	0.7875	0.9594
1857	0.7583	0.8146	0.7125	0.8313
1858	0.7500	0.8010	0.6625	0.8146
1859	0.8167	0.9396	0.7500	0.9573
1860	0.9750	1.0010	0.8250	1.0698
1861	0.8333	0.9292	0.7917	0.9896
1862	0.8167	0.8833	0.7625	0.8906
1863	0.6625	0.7813	0.6250	0.7156
1864	0.6250	0.6458	0.6000	0.7115
1865	0.8500	0.8813	0.6875	0.9292
1866	0.9792	1.0188	0.8583	1.1063
1867	1.0542	1.1354	0.9333	1.1885
1868	1.0125	1.0594	0.9458	1.1031
1869	0.7625	0.8146	0.7250	0.9896
1870	0.8208	0.8760	0.7375	0.9521
1871	0.8458	0.9500	0.7208	1.0177
1872	0.9250	0.9833	0.7375	1.0600
1873	0.9500	1.0198	0.8167	1.1063
1874	0.9833	0.9938	0.8792	1.1031
1875	0.9375	0.9750	0.8042	1.1083
1876	0.9125	0.9490	0.8250	1.1092
1877	0.9292	1.0698	0.8250	1.1677
1878	0.7375	0.7510	0.6250	0.9354
1879	0.8500	0.8875	0.7250	1.0698
1880	0.7375	0.7792	0.6292	0.9302
1881	0.7500	0.8083	0.7000	0.9479
1882	0.7625	0.8604	0.6542	0.9354
1883	0.8000	0.8604	0.6750	0.9635
1884	0.7292	0.7792	0.6000	0.9000
1885	0.7292	0.7458	0.6000	0.9354
1886	0.6542	0.7313	0.6000	0.8792

TABLE 2 Oat Meal per Boll of 140 lbs Imperial Quarter (cont.)

Crop and year	Aberdeen	Ayrshire	Orkney / Shetland	Peebles
1887	0.5542	0.6594	0.5000	0.7094
1888	0.7292	0.7260	0.6292	0.8597
1889	0.6958	0.7271	0.6000	0.8281
1890	0.6667	0.7219	0.5500	0.8154
1891	0.7917	0.8448	0.6833	0.9990
1892	0.8083	0.7500	0.5875	0.9349
1893	0.7250	0.6917	0.5125	0.8149
1894	0.6125	0.6510	0.4708	0.8059
1895	0.5625	0.6365	0.4625	0.7521
1896	0.5875	0.6260	0.5000	0.7844
1897	0.6250	0.6865	0.5333	0.8382
1898	0.6417	0.6688	0.5792	0.8278
1899	0.6000	0.6656	0.5333	0.8017
1900	0.6500	0.6844	0.5167	0.8556
1901	0.6479	0.7333	0.5833	0.8979
1902	0.6896	0.7385	0.6167	0.9042
1903	0.6354	0.7615	0.6042	0.9049
1904	0.6000	0.7010	0.5792	0.8184
1905	0.6167	0.6990	0.5500	0.8316
1906	0.6333	0.6771	0.5750	0.8486
1907	0.7250	0.8563	0.6708	0.9944
1908	0.6250	0.7542	0.6167	0.8635
1909	0.6417	0.7396	0.6250	0.8875
1910	0.5979	0.7083	0.6250	0.8288
1911	0.7500	0.8135	0.6458	0.9382
1912	0.7625	0.8479	0.7292	0.9729
1913	0.6708	0.7771	0.6542	0.9469
1914	0.9000	1.0063	0.7542	1.1667
1915	1.0833	1.1521	1.0167	1.3260
1916	1.5500	1.7219	1.6000	1.9823

TABLE 2 Oat Meal per Boll of 140 lbs Imperial Quarter (cont.)

Crop and year	Aberdeen	Ayrshire	Orkney / Shetland	Peebles
1917	1.7792	1.9333	1.5500	1.9802
1918	2.0000	2.0979	1.8958	2.1000
1919	2.1083	2.2521	2.0000	2.4354
1920	1.7375	2.1615	1.5333	2.1413
1921	1.0000	1.1667	0.9542	1.5677
1922	1.0083	1.1521	0.9792	1.2500
1923	1.0229	1.2375	1.0792	1.2594
1924	1.0813	1.2917	1.0917	1.3854
1925	0.9604	1.2583	0.8958	1.3281
1926	0.8208	1.0260	0.8167	1.0385
1927	1.0146	1.2229	0.9833	1.2531
1928	0.9208	1.1604	0.8833	1.2448
1929	0.7750	1.0833	0.8250	0.9792
1930	0.6583	0.8667	0.8000	0.9271
1931	0.8854	1.0000	0.8083	1.1250
1932	0.6438	0.9167	0.8000	0.9458
1933	0.5552	0.8333	0.8000	0.8021
1934	0.6979	0.8417	0.8000	0.9271
1935	0.6250	0.8250	0.8000	0.8542
1936	0.7250	0.9500	0.9000	1.0260
1937	0.8552	1.0125	0.9250	1.0625
1938	0.7188	0.9552	0.8500	1.0000
1939	1.2729	1.2458	0.9500	1.7448
1940	1.3417	1.8042	1.4000	1.8750
1941	1.1188	1.1750		1.8021
1942	1.0990	1.1125	1.4000	
1943	1.0604	1.2583	1.4000	
1944	1.1667	1.2729	1.4000	
1945	1.1542	1.2750	1.3917	
1946	1.1625	1.2042	1.5417	

TABLE 2 Oat Meal per Boll of 140 lbs Imperial Quarter (cont.)

Crop and year	Aberdeen	Ayrshire	Orkney / Shetland	Peebles
1947	2.5292	2.6167	2.7500	
1948	2.5292	2.6375	3.0000	
1949	2.5167	2.6125	2.5000	
1950	2.5875	2.7167		
1951	3.2250	3.1583	3.0000	
1952	2.7417	2.8667	2.5000	
1953	2.6792	2.8917	3.0000	
1954	2.6708	2.7917	3.0000	
1955	2.4750	3.1313	2.5000	
1956	2.5333	3.1479	3.0000	
1957	2.5458	3.1208		
1958	2.7958	2.9000		
1959	2.6083	2.4750		
1960	2.3792	2.6625		
1961	2.2625	3.0375		
1962	2.8875	3.1833		
1963	2.4208	3.0292		
1964	2.0792	3.1583		
1965	2.5125	3.1750		
1966	2.6667	3.3458		
1967	2.7583	3.3708		
1968	2.6250	4.2625		
1969	2.7833	4.1458		
1970	2.9850	4.4600		
1971	3.1400	2.0500		
1972	3.8400	4.1000		
1973	7.0400	4.9000	6.2500	
1974	9.6500	4.9000		

Note: Orkney / Shetland for 1826-33 prices are per Meil of 177 lbs 12 oz Avoirdupois. Peebleshire prices for First Oat Meal. For 1834-1840 prices are per CWT.

These data are graphed in Figures 2 and $_3$ – the former for the period $_{1826-1974}$ and the latter for the shorter period $_{1826-1966}$ enabling greater discrimination between series and illustrating the gap between county prices, noting that within the entire dataset of $_{32}$ counties throughout the period, the

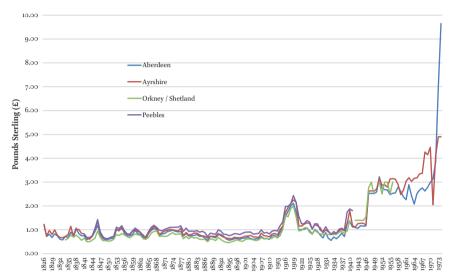


FIGURE 2 Oatmeal Price (£) per Boll (Imperial Quarter of 140lbs): 1826–1974

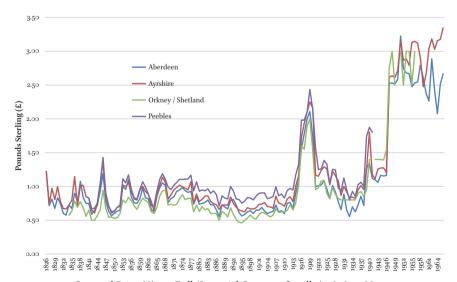


FIGURE 3 Oatmeal Price (£) per Boll (Imperial Quarter of 140lbs): 1826–1966

lowest prices were generally recorded for Orkney and Shetland and highest for Peebleshire.

It is straightforward to adjust the price data, recorded in the manuscript in money of the day or nominal terms, for inflation. Using Aberdeenshire county data Table 3 deploys a long term consumer price inflation index published by the Office for National Statistics (2022) to express the time series in both

TABLE 3 Oat Meal per Boll of 140 lbs Imperial Quarter (Aberdeen)

Crop and year	Oat Meal, price per Boll of 140 Imperial lbs (£ nominal)	Retail Price Index (Jan 1974 =100 CDKO)	Oat Meal, price per Boll of 140 Imperial lb (£ indexed for RPI)
1826	1.2250	11.4	10.7456
1827	0.7167	10.7	6.6978
1828	0.8125	10.4	7.8125
1829	0.6750	10.3	6.5534
1830	0.8333	9.9	8.4175
1831	0.7417	10.9	6.8043
1832	0.6000	10.1	5.9406
1833	0.5750	9.5	6.0526
1834	0.7250	8.7	8.3333
1835	0.6750	8.9	7.5843
1836	0.9000	9.9	9.0909
1837	0.7750	10.1	7.6733
1838	1.0750	10.2	10.5392
1839	0.8375	10.9	7.6835
1840	0.7500	11.1	6.7568
1841	0.7500	10.9	6.8807
1842	0.5875	10	5.8750
1843	0.6500	8.9	7.3034
1844	0.7167	8.9	8.0524
1845	0.9250	9.3	9.9462
1846	1.1917	9.7	12.2852

TABLE 3 Oat Meal per Boll of 140 lbs Imperial Quarter (Aberdeen) (cont.)

Crop and year	Oat Meal, price per Boll of 140 Imperial lbs (£ nominal)	Retail Price Index (Jan 1974 =100 CDKO)	Oat Meal, price per Boll of 140 Imperial lb (£ indexed for RPI)
1847	0.7833	10.9	7.1865
1848	0.6333	9.5	6.6667
1849	0.5667	8.9	6.3670
1850	0.6000	8.4	7.1429
1851	0.6333	8.1	7.8189
1852	0.6500	8.1	8.0247
1853	1.0000	8.9	11.2360
1854	0.9542	10.2	9.3546
1855	1,1000	10.5	10.4762
1856	0.8458	10.5	8.0556
1857	0.7583	10	7.5833
1858	0.7500	9.1	8.2418
1859	0.8167	9	9.0741
1860	0.9750	9.3	10.4839
1861	0.8333	9.5	8.7719
1862	0.8167	9.3	8.7814
1863	0.6625	9	7.3611
1864	0.6250	8.9	7.0225
1865	0.8500	9	9.4444
1866	0.9792	9.5	10.3070
1867	1.0542	10.1	10.4373
1868	1.0125	10	10.1250
1869	0.7625	9.5	8.0263
1870	0.8208	9.5	8.6404
1871	0.8458	9.6	8.8108
1872	0.9250	10	9.2500
1873	0.9500	10.4	9.1346
1874	0.9833	10	9.8333

TABLE 3 Oat Meal per Boll of 140 lbs Imperial Quarter (Aberdeen) (cont.)

Crop and year	Oat Meal, price per Boll of 140 Imperial lbs (£ nominal)	Retail Price Index (Jan 1974 =100 CDKO)	Oat Meal, price per Boll of 140 Imperial lb (£ indexed for RPI)
1875	0.9375	9.8	9.5663
1876	0.9125	9.8	9.3112
1877	0.9292	9.7	9.5790
1878	0.7375	9.5	7.7632
1879	0.8500	9.1	9.3407
1880	0.7375	9.4	7.8457
1881	0.7500	9.3	8.0645
1882	0.7625	9.4	8.1117
1883	0.8000	9.3	8.6022
1884	0.7292	9.1	8.0128
1885	0.7292	8.8	8.2860
1886	0.6542	8.7	7.5192
1887	0.5542	8.6	6.4438
1888	0.7292	8.7	8.3812
1889	0.6958	8.8	7.9072
1890	0.6667	8.8	7.5758
1891	0.7917	8.9	8.8951
1892	0.8083	8.9	9.0824
1893	0.7250	8.8	8.2386
1894	0.6125	8.7	7.0402
1895	0.5625	8.6	6.5407
1896	0.5875	8.5	6.9118
1897	0.6250	8.7	7.1839
1898	0.6417	8.7	7.3755
1899	0.6000	8.8	6.8182
1900	0.6500	9.2	7.0652
1901	0.6479	9.2	7.0426
1902	0.6896	9.2	7.4955

TABLE 3 Oat Meal per Boll of 140 lbs Imperial Quarter (Aberdeen) (cont.)

Crop and year	Oat Meal, price per Boll of 140 Imperial lbs (£ nominal)	Retail Price Index (Jan 1974 =100 CDKO)	Oat Meal, price per Boll of 140 Imperial lb (£ indexed for RPI)
1903	0.6354	9.3	6.8324
1904	0.6000	9.3	6.4516
1905	0.6167	9.3	6.6308
1906	0.6333	9.3	6.8100
1907	0.7250	9.4	7.7128
1908	0.6250	9.4	6.6489
1909	0.6417	9.5	6.7544
1910	0.5979	9.6	6.2283
1911	0.7500	9.6	7.8125
1912	0.7625	9.9	7.7020
1913	0.6708	9.8	6.8452
1914	0.9000	9.8	9.1837
1915	1.0833	11	9.8485
1916	1.5500	13	11.9231
1917	1.7792	16.3	10.9151
1918	2.0000	19.9	10.0503
1919	2.1083	21.9	9.6271
1920	1.7375	25.3	6.8676
1921	1.0000	23.1	4.3290
1922	1.0083	19.9	5.0670
1923	1.0229	18.7	5.4701
1924	1.0813	18.6	5.8132
1925	0.9604	18.6	5.1635
1926	0.8208	18.5	4.4369
1927	1.0146	18	5.6366
1928	0.9208	18	5.1157
1929	0.7750	17.8	4.3539
1930	0.6583	17.3	3.8054

TABLE 3 Oat Meal per Boll of 140 lbs Imperial Quarter (Aberdeen) (cont.)

Crop and year	Oat Meal, price per Boll of 140 Imperial lbs (£ nominal)	Retail Price Index (Jan 1974 =100 CDKO)	Oat Meal, price per Boll of 140 Imperial lb (£ indexed for RPI)
1931	0.8854	16.6	5.3338
1932	0.6438	16.2	3.9738
1933	0.5552	15.8	3.5140
1934	0.6979	15.8	4.4172
1935	0.6250	15.9	3.9308
1936	0.7250	16	4.5313
1937	0.8552	16.6	5.1519
1938	0.7188	16.8	4.2783
1939	1.2729	17.3	7.3579
1940	1.3417	20.2	6.6419
1941	1.1188	22.4	4.9944
1942	1.0990	24	4.5790
1943	1.0604	24.8	4.2759
1944	1.1667	25.5	4.5752
1945	1.1542	26.2	4.4052
1946	1.1625	27	4.3056
1947	2.5292	28.9	8.7514
1948	2.5292	31.1	8.1324
1949	2.5167	32	7.8646
1950	2.5875	33	7.8409
1951	3.2250	36	8.9583
1952	2.7417	39.3	6.9763
1953	2.6792	40.5	6.6152
1954	2.6708	41.3	6.4669
1955	2.4750	43.1	5.7425
1956	2.5333	45.3	5.5923
1957	2.5458	46.9	5.4282
1958	2.7958	48.4	5.7765

TABLE 3 Oat Meal per Boll of 140 lbs Imperial Quarter (Aberdeen) (cont.)

Crop and year	Oat Meal, price per Boll of 140 Imperial lbs (£ nominal)	Retail Price Index (Jan 1974 =100 CDKO)	Oat Meal, price per Boll of 140 Imperial lb (£ indexed for RPI)
1959	2.6083	48.6	5.3669
1960	2.3792	49.1	4.8456
1961	2.2625	50.8	4.4537
1962	2.8875	53	5.4481
1963	2.4208	54	4.4830
1964	2.0792	55.8	3.7261
1965	2.5125	58.4	4.3022
1966	2.6667	60.7	4.3932
1967	2.7583	62.3	4.4275
1968	2.6250	65.2	4.0261
1969	2.7833	68.7	4.0514
1970	2.9850	73.1	4.0834
1971	3.1400	80	3.9250
1972	3.8400	85.7	4.4807
1973	7.0400	93.5	7.5294
1974	9.6500	108.5	8.8940

nominal (money of the day) and inflation adjusted (real) terms; using January 1974 prices as the reference date.

From this is it possible to identify periods of high and low prices, the former coinciding with times of war, and the latter with economic recessions.

4 Research Potential and Conclusion

The dataset opens a number of avenues for economic and ecclesiastical historians.

Firstly, by substantially extending existing published fiars price time series beyond the period covered by Gibson and Smout (1995a), it offers the opportunity to develop analyses of the integration and operation of Scottish regional

grain markets from the early nineteenth through to the late twentieth century. This in turn unlocks analysis of the place of Scotland's economy within Great Britain and the United Kingdom, i.e. its trading position, and way in which Scottish market integration (market efficiency and price convergence) facilitated this cross border (English and Irish) trade.

Secondly, it provides the underpinning data necessary to enable the calculation of the overwhelming majority of stipends paid to ministers of the Church of Scotland during the nineteenth and early twentieth centuries. The standard historical accounts of the clerical stipendiary system are rudimentary, and generally proceed on the basis of limited financial data (Cormack, 1930; Gibson,1961; Hunter, 1895, 1897; Macgregor, 1930), consequently empirical analysis of the operation of the clerical labour market in Scotland is a neglected area of research. Without foundational data – fiars prices at the county level – study of many of the rudimentary questions of labour economics is inhibited. This data unlocks a number of avenues; for example, calibration of absolute and relative remuneration for the clerical profession, the impact of remuneration on the composition of the clerical labour force (its quantity and quality) and whether this is causally linked to the organisation's development. The availability of agricultural price data at the county level immediately opens the way to constructing long runs of stipend (wage) data collected on a consistent basis, clearing a longstanding obstacle to applying a number of standard statistical analytical methods in analysing the operation of this important labour market. Early work deploying fiars data in this way has been published recently by Sawkins (2023).

More generally, analyses deploying material from this dataset promises to throw new light on the pace and geographical pattern of the evolution of the Scottish nation as it completed its transformation from an agriculturally based to an industrially based economy and society in the nineteenth and early twentieth century.

References

Bateman, V. N. (2011). The evolution of markets in early modern Europe, 1350–1800: a study of wheat prices. *Economic History Review*, 64(2), 447–471.

Blakeway, A. (2015). The sixteenth-century price rise: new evidence from Scotland, 1500–85. *Economic History Review*, *68*(1), 167–190.

Brunt, L., and Cannon, E. (2013). The truth, the whole truth, and nothing but the truth: the English Corn Returns as a data source in economic history, 1770–1914. *European Review of Economic History*, 17, 318–339.

Cassidy, D., and Hanley, N. (2020). Regional market integration and the emergence of a Scottish national grain market. *European Historical Economics Society Working Paper*, No. 200, November 2020.

- Chilosi, D., Murphy, T. E., Studer, R., and Tuncer, A. C. (2013). Europe's many integrations: Geography and grain markets, 1620–1913. *Explorations in Economic History*, 50(1), 46–68.
- Committee on Fiars Prices in Scotland. (1911). Report of the Departmental Committee Appointed by the Scottish Office and the Board of Agriculture and Fisheries to Enquire and Report upon Fiars Prices in Scotland, with copy of the Minute Appointing the Committee. Cd 5763 and Cd 5764. HMSO, London.
- Cormack, A. A. (1930). *Teinds and Agriculture. An Historical Survey*. Oxford University Press.
- Elliot, N. (1879). *The conversion into money of grain and victual payments in Scotland*. T & T Clark, Edinburgh.
- Elliot, N. (1886). *The Teinds of Scotland. Year-Book of the Church of Scotland, 1886.* The Church of Scotland, Edinburgh.
- Elliot, N. (1890). *Ministers' Stipends. The Book of the Church of Scotland (Year-Book),* 1890. The Church of Scotland, Edinburgh.
- Federico, G. (2011). When did European markets integrate? *European Review of Economic History*, 15 (1), 93–126.
- Flinn, M. W., Gillespie, J., and Hill, N. (1977). Scottish population history from the seventeenth century to the 1930s. Cambridge University Press.
- Gemmill, E., and Mayhew, N. (1995). *Changing values in medieval Scotland: a study of prices, money, and weights and measures*. Cambridge University Press.
- Gibson, A. J. H. (1961). Stipend in the Church of Scotland. William Blackwood and Sons.
- Gibson, A. J. S., and Smout, T. C. (1995a). *Prices, Food and Wages in Scotland* 1550–1780. Cambridge University Press.
- Gibson, A. J. S., and Smout, T. C. (1995b). Regional prices and market regions: The evolution of the early modern Scottish grain market. *Economic History Review*, *XLVIII*(2), 258–282.
- $Gras, N. \, S. \, B. \, (1915). \, \textit{The evolution of the English corn market}. \, Harvard \, University \, Press.$
- Hunter, D. (1895). Report of the Committee on Fiars Prices to the General Assembly of the Church of Scotland. Edinburgh.
- Hunter, D. (1897). Fiars Prices: Their Relation to Ministers' Stipends. The Book of the Church of Scotland (Year-Book), 1897. The Church of Scotland, Edinburgh.
- Macgregor, J. (1930). *The Income of the Ministry, The Church of Scotland Year-Book* 1930. The Church of Scotland, Edinburgh.
- Mitchison, R. (1965). The movements of Scottish corn prices in the seventeenth and eighteenth centuries. *Economic History Review* (2nd series), 18, 278–91.

- National Records of Scotland. (1826–1974). *Teind Court Register of Fiars' Prices*. National Records of Scotland, Reference TE 18/11, Edinburgh.
- Office for National Statistics. (2022). Consumer price inflation time series dataset (MM23). Retail price index: Long run series. CDKO. London. www.ons.gov.uk /economy/inflationandpriceindices/datasets/consumerpriceindices.
- Olson, M., and Harris, C. C. (1959). Free trade in "Corn": A statistical study of the prices and production of wheat in Great Britain from 1873 to 1914. *Quarterly Journal of Economics*, 73(1), 145–168.
- Parliamentary Papers. (1834). Corn Averages, Scotland. Copies of the Reports of the Committee of the General Assembly of the Church of Scotland on the Mode of striking the Fiars, of the Date 1830 and 1831, with the relative Queries and Abstracts. House of Commons, 259, London.
- Parliamentary Papers. (1837–38). Third Report of the Commissioners of Religious Instruction, Scotland. Presented to both Houses of Parliament by Command of Her Majesty, 113, London.
- Parliamentary Papers. (1896). Fiars Prices (Scotland). Return "for each County in Scotland of the Fiars Prices of each Description of Grain, &c., as struck by the Sheriffs and Juries of Counties for the Years 1870 to 1894, inclusive, distinguishing the several Classes of Grain, &c." House of Commons, 146, London.
- Paterson, G. (1852). An historical account of the fiars in Scotland, with remarks on the present modes of striking them, and suggestions for a more uniform procedure without prejudice to existing interests. Edinburgh.
- Persson, K. G., and Sharp, P. (2015) *An economic history of Europe*. Cambridge University Press.
- Sawkins, J. W. (2022). Financing stipend: The Post-Reformation established Church in Edinburgh. *Scottish Church History*, 51(1), 26–52.
- Sawkins, J. W. (2023). The financing of ministerial stipends in the established Church of Scotland: The rural parish. *The Journal of Ecclesiastical History*, 1–36. doi.org/10.1017/S0022046922002007.
- Sawkins, J. W., and Smith, E. P. (2022). *Teind Court register of fiars' prices: Scotland, 1826–1974.* [Data Collection]. UK Data Service. www.doi.org/10.5255/UKDA-SN-855963.
- Solar, P. M., and Klovland, J. T. (2011). New series for agricultural prices in London, 1770–1914. *The Economic History Review*, 64(1), 72–87. www.doi.org/10.1111/j.1468 -0289.2009.00527.x.