

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Ó Gráda, Cormac

Working Paper
Irish agriculture after the land war

Centre for Economic Research Working Paper Series, No. WP04/06

Provided in Cooperation with:

UCD School of Economics, University College Dublin (UCD)

Suggested Citation: Ó Gráda, Cormac (2004): Irish agriculture after the land war, Centre for Economic Research Working Paper Series, No. WP04/06, University College Dublin, Department of Economics, Dublin, https://hdl.handle.net/10197/477

This Version is available at: https://hdl.handle.net/10419/72431

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



CENTRE FOR ECONOMIC RESEARCH

WORKING PAPER SERIES

2004

Irish Agriculture after the Land War

Cormac Ó Gráda, University College Dublin

WP04/06

April 2004

DEPARTMENT OF ECONOMICS UNIVERSITY COLLEGE DUBLIN BELFIELD DUBLIN 4

IRISH AGRICULTURE AFTER THE LAND WAR¹

Cormac Ó Gráda

University College, Dublin

Email: ograda@princeton.edu

¹ To appear in Stanley Engerman and Jacob Metzer (eds.), *Land Rights*, *Ethno-Nationality and Sovereignty in History* (London: Routledge, forthcoming).

Irish agriculture after the Land War

Irish agriculture's shift from a system of landlord-and-tenant to peasant proprietorship was the product of an on-again, off-again Land War that lasted from 1879 to 1903. Broadly speaking, the landlord-tenant cleavage complemented the division between pro-British Unionism and Irish Nationalism. Moreover, again broadly speaking, the demise of the landlords entailed a return of the land to people who saw themselves as descendants of those who had lost their lands in the bloody Tudor, Jacobean, Cromwellian, and Williamite confiscations of the sixteenth and seventeenth centuries. The myth of vicarious dispossession distorted the historical record since, as far as the native masses were concerned, the confiscations for the most part had meant new landlords rather than dispossession. By the early eighteenth century the bulk of Irish land had passed from Gaelic or Old English (as the Catholic descendants of earlier conquerors are known) to New English or Scottish landowners. The myth also ignored the fact that a sizeable minority of tenants were the descendants of planters and immigrants who had arrived at the time of the confiscations. Though the Land War was really a struggle about who should capture the Ricardian rents, both sides emphasized the implications for farm productivity. Those implications have been much debated, then and since. The research of recent decades suggests that while farmers' rhetoric exaggerated the likely gains, landlords exaggerated the likely losses.

In this chapter we look at four aspects of the relationship between land tenure, nationality, and agricultural performance. Part 1 offers a brief overview of the debate about productivity change. Part 2 assesses the impact of the Irish tenurial revolution on the market in land. Part 3 reviews the claim that in their quest for peasant proprietorship farmers sacrificed the efficiency improvements to be gained from agricultural co-operation. Part 4 is about the related issue of winter dairying.

Productivity change

Since the 1960s several studies have sought to infer the impact of tenurial change from estimates of agricultural output before and after the change. Estimating Irish agricultural productivity in the past is not so easy, however. Even Ireland's precocious agricultural statistics (which date from 1847) shed little or no light on milk yields, carcass weights, animal mortality, product quality, fertilizer inputs, seed ratios, and the like. These are all necessary building blocks in calculating output. Yet evaluations of tenure have turned largely on movements in output and productivity (Crotty 1966; Solow 1971; Ó Gráda 1993; Turner 1996; Solar 1998).

The 'revisionist' literature on Irish land tenure dates from Raymond Crotty's wayward but brilliant *Irish Agricultural Production* (1966). Before Crotty there was a broad consensus that what anti-landlord leader Michael Davitt dubbed the 'fall of feudalism' made both ethical and economic sense. Crotty, on the contrary, believed the old tenurial system to have been more productive than what replaced it. This was because its rent-maximising landlords forced their tenants to be efficient. In their wake, there was no longer an active market for holdings forcing incompetent farmers to cede their holdings to those better qualified. Crotty invoked the apparent failure of agricultural output to expand under owner-occupancy as evidence of the reduced pressure on farmers to produce. With the demise of the landlords, the lack of a market in holdings left an ever-higher proportion of the land in the hands of under-performers. But Crotty was no pro-landlord apologist: a follower of Henry George and Michael Davitt, he believed that land nationalisation would generate the same outcome in terms of efficiency as landlordism.

Crotty's comparisons of output and productivity before and after the Land War were evocative but hardly rigorous. His findings bear comparison with Barbara Solow's analysis of landlord behaviour in the post-famine era, which was published in 1971, but the product of research completed some years earlier. Like Crotty's, Solow's conclusion was strikingly 'revisionist', in that

it also suggested that the Land War was bad for Irish agriculture. However, Solow's landlords were much less likely to evict than Crotty's, and more moderate in their rent demands. The Land War, by concentrating farmers' attention on extracting more of the Ricardian rent from landlords, rather than on managerial choices that would increase output and productivity, damaged Irish agriculture at a crucial juncture. In this view Irish farmers were too preoccupied with night raids and boycotts to be interested in the centrifugal separator or the latest chemical fertilizers. But Solow also invoked output data to argue that the Land War and peasant proprietorship were bad for Irish agriculture, buttressing her case with brand new estimates of net output in 1876, 1881, and 1886.

In this chapter I rely instead on Michael Turner's recent estimates of agricultural output and productivity between the Great Famine and the Great War. It seems unlikely that these will be bettered in the near future, even bearing in mind the cautions registered by Peter Solar (1998). Table 6.1 reproduces the most relevant of Turner's numbers. While the lower growth in the middle period could be interpreted as implying that the Land War exacted a cost in terms of productivity, the most striking aspect of Turner's numbers is the acceleration in productivity growth in the final period. While Turner's estimated annual growth rate of 0.8 per cent in the two decades or so preceding World War I is less than rates achieved in the U.S., Japan, or Denmark in these decades, it is very impressive by comparison with that of the neighbouring island (Turner 2000: 318-9). Only a radical revision of Turner's numbers would overturn their implication that, at the very least, the shift to owner-occupancy did not hurt Irish agricultural productivity.

The Unionist/landlord vs. Catholic/tenant cleavage mentioned above does not fit much of the northern province of Ulster. In political terms Ulster Unionism was almost exclusively non-Catholic, but it transcended class differences in the countryside, as indeed did the Orange Order. One byproduct of radical nationalists exploiting the land question was the equivocal attitude of unionist farmers in Ulster towards the struggle for land reform.

<Table 6.1 about here>

The majority of Northern Ireland farmers were descendants of settlers from Scotland and northern England in the seventeenth and early eighteenth centuries, and it has long been argued that the resulting landlord-tenant nexus in Ulster differed from that prevailing in the rest of Ireland. Ulster farmers benefited from 'Ulster custom', a variant of tenant right whereby a departing tenant could cash in the value of any unexhausted improvements carried out by him. This custom gave the Ulster tenant the reassurance that eviction would not rob him of the fruits of his investments. Another difference between North and South is that during the Land War Ulster tenants tended to opt for negotiation rather than confrontation. Comparing productivity levels and rates of change in Northern and Southern Ireland is therefore also apposite.

William Gladstone's land reforms of the 1870s and 1880s in effect sought to spread the benefits of 'Ulster custom' to the rest of the island. But the signs of any resultant improvements are elusive. There was no disproportionate jump in farming stocks and yields outside Ulster in the wake of the legislation. On the eve of the Great War outbuildings were no more numerous in Ulster than in the other three provinces. Inter-provincial comparisons suggest that, as far as farming is concerned, the Ulster vs. the Rest contrast has been overdone. On the one hand, Ulster custom was much more widespread than implied. On the other, the need for such an institutional remedy was mitigated by the reality that, both before and after the Gladstonian reforms, most farms were passed on from father to son (Ó Gráda 1993: 156-9).

Estimates of agricultural output in the two Irelands in the early twentieth century, before the two economies drifted apart, are corroborative (see Table 6.2). They suggest that output per worker in the what would become the 'Catholic' Irish Free State was slightly higher than in the 'Protestant' six

northern counties in 1912, and significantly so in the mid-1920s. This advantage can hardly have stemmed from a greater endowment of physical capital.² The land-labor ratio, it is true, was higher in the South, particularly when the quality of land is corrected for. In Table 6.2, where the correction applied is based on the poor law valuation, land productivity was higher in the North in both 1912 and 1925-6. A back-of-the-envelope estimate of total factor productivity, applying 0.6 and 0.4 as the factor shares of labor and land to the data in Table 6.2, implies that it was marginally lower (by 3.7 per cent) in the twenty-six counties at the earlier date and marginally higher (by 10.8 per cent) at the later date.³

<Table 6.2 about here>

Thereafter the south fell behind and the two agricultures went their separate ways. But policy shifts in Ireland and the United Kingdom were to blame for this, not some ingrained difference between farmers in the two Irelands. Between the early 1930s and the late 1940s policy in the Irish Free State benefited tillage at the expense of grass, and the agricultural policies of the United Kingdom deprived Irish producers of the easy access they had to the British market for centuries. The productivity of southern farmers, deprived of the higher British prices available to their northern counterparts and shunted off their comparative advantage, fell behind. From the 1970s on, however, the Common Agricultural Policy of the European Union placed the two agricultures on a level playing field once more. As a result they have become more similar again in terms of output mix, and southern agriculture has made up the ground it lost after independence (Ó Gráda 1991; 1997: Ch. 5).

The new owners and the land market

The Great Irish Famine was the straw that broke the back of hundreds of already heavily indebted landed proprietors (Eiríksson and Ó Gráda 1996). It prompted in 1849 the creation of the

Incumbered Estates Court, which freed up the Irish market in land by forcing bankrupt landlords to sell off part or all of their properties. The prolific Dublin lawyer-economist William Neilson Hancock (1820-1888) noted a significant drop in the cost of borrowing on the security of land in the wake of the court's creation, and attributed this to the reduced cost of securing transfer (Hancock 1851). For a time the market in Irish land was a very active one, and the ensuing transfers from careless, old-style Castle Rackrent landlords to a newer more grasping kind was much commented on.

Once the Incumbered Estates Court had done its work of purging bankrupt proprietors, the market in land became quiet one again for some decades. What of the post-Land War period? Hard, continuous data on the extent of the market for land in Ireland over the past century or so are lacking. However, a survey carried out in the late 1970s showed that on average only about 0.5 percent of all farmland passed through the market each year, and figures released by the Central Statistics Office suggest a similar proportion in the 1990s. Does this mean that the market for land is 'thin'?

Here Denmark and the United Kingdom offer useful points of comparison. Danish data suggest that over the past century or so an average of about five per cent of Danish farms and Danish land was bought and sold annually. Some of the sales might be inter-generational - in 1895-1909 28.5 per cent of sales involved *familiesalg* (sale within the family), in 1918-22 13 per cent - but the bulk always represented *frie Salg* (free sale). The percentages, hardly surprisingly, were subject to wide fluctuation. At the turn of the century the proportion on the market was three to four per cent, but in the depressed early 1930s it reached eight per cent.⁴

Continuous data on land sales of five hectares or above in England are available since 1946/7. The number of transactions peaked at 10,259 in 1959/60 and troughed at 2,720 in 1991/2. The peak in terms of area sold was 399,029 hectares in 1948/9 and the trough was 82,475 hectares in 1991/2. These latter numbers represent 3.6 and 0.7 per cent of all farmland. Between 1946/7 and 1996/7 the

aggregate area sold averaged at just over two hundred thousand hectares, or slightly less than two per cent of all farmland.

Such data are too partial for definitive comparisons, but in both Denmark and the U.K. the proportions dwarf the Irish level. Why has the market for land in Ireland been thinner? Hancock (1851) was one of several observers of Irish agriculture to wonder 'why is the loan capital of Ireland not lent more freely to the farmers of Ireland?' His answer was the difficulty and expense of recovering debt. Part of the answer is an ethos that did not consider land a commodity; when farmers defaulted the banks were not supposed to foreclose. This can only have increased the reluctance of banks to advance large sums to farmers on the security of their holdings.

One of the ironies of Irish land reform is that the new owners, because they were unwilling to let go of their land in order to repay debt, did not bring ownership to its logical conclusion. A submission from the Agricultural Credit Corporation to the 1934-8 Banking Commission stated that the trouble associated with selling the land of an indebted farmer without his consent 'militates against the extension of credit to the farming community'. The Commission, echoing the sentiments of an earlier inquiry in 1926, called for legislation making foreclosure faster and more effective (Banking Commission 1938: para. 413).

Yet the problem of farm credit persisted. A few years later a scheme to provide farmers with soft loans, proposed by Senators John C. Counihan and Joseph Johnston, and supported by Deputy James Dillon, attracted considerable attention (PDSE 1939). The scheme prompted a scathing memo from the fearsome secretary of the Department of Finance, J.J. McElligott, who likened it to 'the assignats of the French revolution'. In McElligott's eyes, granting all farmers annuities which they could use as security against bank loans, was:

no more new than the ideas of Major Douglas and others in the currency sphere which are ancient heresies furbished up and advanced as the fruit of independent thinking by their

modern exponents.

Minister of Agriculture James Ryan was no less sceptical, convinced that most schemes relating to credit for farmers were 'propaganda' and that easy credit would be 'the ruination of farmers'.

McElligott sought to put the issue to sleep by organizing a special conference involving the two senators and representatives of the various government departments and the banking system. The redoubtable Sir John Keane, ex-senator and governor of the Bank of Ireland, raised the old bogey of irrecoverable loans:

We find that problem in the Banks frequently and we cannot force a sale on account of the boycott. It would be much better if there was a free sale and not have this social boycott thereby enabling bona fide people to buy the land and work it to full production.

Robert Barton, chairman of the Agricultural Credit Company, also believed that the fault lay with the farmers themselves, regretting that land as a security had 'a nuisance value', and was therefore a poor basis for credit. Against Counihan's lame objection that allowing the land of defaulters to be sold to 'speculators' was bad 'from a national point of view', Barton replied that farms had passed into the hands of people not short of capital and better than the previous occupiers. McElligott's final words to the second session of this unusual conference were that 'we must have in mind a question of cardinal importance that whoever is going to advance credit must be repaid'.⁵

The sense that farmers were starved of capital persisted. A 1960 memorandum from the Department of Agriculture noted that 'for largely historical reasons land as such is practically untouched as a basis for credit in Ireland. This situation is a serious deterrent to the sound extension of long-term credit in Ireland'. Even today controversies about farmers' resistance against creditors occasionally make the headlines in Ireland (e.g. the high-profile eviction of the Graham brothers in

Donegal in 1997 at the behest of National Irish Bank). Yet the disproportionate share of agriculture in the loans and advances of the associated banks suggests that land is now nearer to being a commodity than it used to be.

Co-operation and creameries

The Irish are rightly annoyed at always having Denmark held up to them as a good example.

Barbara L. Solow (1971: 151n).

The sense that 'Irishness' or 'Catholicism' somehow inhibited Irish agricultural progress was part of conservative pro-landlord rhetoric. Even Sir Horace Plunkett, liberal Unionist politician and inspirational founder of the Irish agricultural co-operative movement, was not immune. In *Ireland in the New Century* he complained about 'the extravagant church building in a country so backward as Ireland' and the 'anomalous' numbers of clergy, and berated the negative impact of Roman Catholicism's 'reliance...on authority, its repression of individuality, and its complete shifting of...the moral centre of gravity to a future existence' on material progress. Given Ireland's low level of education, Plunkett believed that such a combination was bound to produce fatalism and resignation among the rural masses. Inevitably, his bigotry gave offence (Plunkett 1904: 101-2, 108, 166-7; Keating 1984: 342-46; Kennedy 1996: 103-4; West 1986).⁷

In the eyes of Plunkett and his Irish Agricultural Organisation Society (IAOS), such fatalism helps explain Ireland's failure to become 'a second Denmark', a failure reflected in its relative lack of enthusiasm for agricultural co-operation. In late nineteenth-century Denmark creameries and co-operation were almost synonymous. In Ireland not only did the diffusion of the new milk separating

technology lag behind Denmark, the co-operative mode of production was also much less to the fore. While nationalist Irish farmers – so the story goes – concentrated on battling and outwitting their landlords, their Danish rivals (who had no landlords to distract them) forged ahead by concentrating on the more mundane activity of increasing both output and productivity. This Hiberno-Danish rivalry spawned an extensive comparative literature in Ireland (e.g. Beddy 1943; Johnston 1931; Crotty 1966).

The two cartoons reproduced below reflect the enduring conviction that Irish milk and butter producers were needlessly and foolishly sacrificing output and markets to their Danish competitors. The cruder of the two cartoons (6.1), published in the IAOS organ, *The Irish Homestead* (12 December 1896), draws an analogy between the ancient battle of Clontarf, where an army led by a coalition of Irish chieftains defeated the Danes and their local allies, and the ongoing 'war' between dairy farmers, which the Irish were losing due to their failure to innovate and co-operate. The second, from the short-lived *Leprecaun* (June 1910), accuses the Irish dairy farmer of being lazier than his Danish rival. But although the Ireland-Denmark comparison has an obvious appeal, it is not the easiest or the most appropriate. Clearly the diffusion of creameries was slower and less complete in Ireland than in Denmark (Ó Gráda 1977). There are two distinct aspects to this. First, there was the lag in adopting the new dairying technology. Second, in Ireland proprietary firms, often belonging to merchants with long experience in the butter trade, were quicker to employ the new technology than co-operatives.

<Cartoons 6.1 and 6.2 about here>

Supporters of the rural co-operative movement put this down to the inadequacy of the co-operative response in Ireland. They argue that whereas in Denmark farmers co-operated with alacrity, in

Ireland the co-operative movement was a top-down operation, promoted by the gentry and greeted with scepticism at first by (mainly nationalist) dairy farmers. The slow start of the co-operative sector could equally, however, be seen as evidence of the adaptability and dynamism of the proprietary sector. Unfortunately, the proprietaries are less well documented than the IAOS's co-operatives. Local histories of the co-operative movement list several proprietary creameries and indeed imply a vibrant proprietary sector in the 1880s and 1890s, nonetheless (see in particular Jenkins 2000: 17-34; O'Shea 2001: 10-11). It also bears noting that several of the early co-operatives had begun life as proprietaries. The relative strength of the proprietary sector in Ireland is a reminder that models of creamery diffusion that focus only on the co-operative mode are mis-specified.⁸

Apart from this institutional aspect, the different endowments and market constraints facing Danish and Irish butter producers mattered. The resource endowments of the two agricultures were different and are difficult to control for. Complementarities between different forms of agricultural production complicated matters. Milk production constrained pig production, and the choice of livestock breed dictated by the live cattle market constrained milk production. Reliance on grass influenced the seasonality of dairying output (on which more below). And, although in most respects the trade between Ireland, Great Britain, and Denmark was free, the British embargo on live cattle imports from Denmark in 1892 tilted the choice of Danish producers towards more dairying and less fat cattle. This means that the much faster growth in Danish butter production in the 1890s and 1900s was in part a constrained response. Between 1875/9 and 1910/4 dairying's share in Danish agricultural output rose from 24 to 37 per cent, while its share fell back marginally in Ireland, from about 21 to 18 per cent. The sharp rise in the price of store cattle relative to butter in these years in Ireland doubtless had something to do with this (Aage Hansen 1984: 225; Turner 1996: 116; 266-7).

In an earlier study of co-operative dairying in Ireland Ó Gráda (1977) sought to explain the regional variation in the spread of co-operative creameries in terms of cow densities and the demand

for milk for human consumption. To the extent that cow density in turn depended on creamery diffusion, my ordinary least squares estimation will have produced biased results. Concentrating on the situation on the eve of the First World War, by which time diffusion had three decades in which to proceed as far as it could, minimized the bias. Surprisingly, perhaps, three explanatory variables - the milch-cow density, the number of cows, and population -- accounted for over one-half of the variation across counties in co-op density. Thus the spatial spread of co-operative creameries in Ireland on the eve of the Great War predicted by a very simple model 'made sense'.

Recently Kevin O'Rourke has revived this dormant subject, paying particular attention to whether Irish 'culture' helps explain why Irish farmers failed to match their Danish rivals in terms of co-operation and innovation diffusion (O'Rourke 2001). O'Rourke's provocative study offers an opportunity to review some of the issues raised in the controversy about agricultural co-operation in Ireland. In this study culture is encapsulated by 'education, uncertain property rights, and social capital'. However, instead of comparing Ireland and Denmark directly, O'Rourke exploits the variation in the diffusion of co-operative creameries across Irish counties for explanations of underperformance. In other words his focus is on whether 'variables identified as important for innovation and growth by cross-country regressions' also help explain the range of experience within Ireland.

Our main interest here is in O'Rourke's three main proxies for 'culture'. These are (a) the percentage of the population that was illiterate (*ILLIT*), (b) the percentage professing the Catholic religion (*RCSHARE*), and (c) a variable representing harmony between landlord and tenant (*AGREE*). In the wake of the Irish land legislation of 1881 tenants were entitled to apply to a special court for a 'fair' rent settlement that would last fifteen years. Alternatively, they could register an agreed out-of-court settlement with their landlords. *AGREE* is defined as the percentage of tenants in a county opting for bilateral agreements. By implication the more 'Danish' counties in Ireland were those with fewer Catholics and/or fewer illiterates, and those with more harmonious tenurial relations. O'Rourke

estimates a model of diffusion which incorporates both the 'economic' variables described earlier and these three 'cultural' variables. He then uses the estimated coefficients on the 'cultural' variables to simulate Danish conditions by setting *ILLIT* and *RCSHARE* equal to zero and *AGREE* equal to one. The new 'non-economic variables' account for a further ten per cent or so of the variation in cooperative creameries. But are *ILLIT*, *RCSHARE*, and *AGREE* truly 'non-economic variables'? Let us consider them in turn.

The literature on the diffusion of technology certainly tells us that regions with high levels of illiteracy are slower to adopt new technologies such as the centrifugal separator, be it in co-operative or proprietary guise. It is also true that the extent of illiteracy is sometimes taken as a proxy for 'culture' (e.g. Foreman-Peck and Lains 2000). But literacy also costs money and time. That is why in the past, in Ireland as elsewhere, the children of the poor were less likely to attend school in the first place, and more likely to leave at a young age. One of the most robust findings of the anthropometric history literature is that in the eighteenth and nineteenth centuries literate convicts and soldiers were appreciably taller than their illiterate colleagues. In pre-famine Ireland literacy added about over two centimeters to height; in the 1880s it was still adding half a centimeter (e.g. Ó Gráda 1994; Mokyr and Ó Gráda 1996). The most plausible explanation for these differences is that those parents who could afford to send their children to school could also afford to feed and clothe them well and provide them with the available medical care. It is hardly surprising, then, that there was a strong correlation across Irish regions between illiteracy and excess mortality during the Irish Famine (Ó Gráda 1999: 30-3). In post-famine Ireland too literacy lagged where poverty was most intense. In Ireland a century ago the variable ILLIT measured a resource constraint, not a cultural option. If their history and poverty made late-nineteenth century Irish farmers as a group less literate than their Danish peers, then their adoption of an unfamiliar process innovation was bound to be more hesitant.

Secondly, O'Rourke interprets *AGREE*, the percentage of tenants opting for out-of-court rent settlements, as a proxy for landlord-tenant relations. Not being able to agree on an out-of-court settlement meant, in the spirit of Barbara Solow's classic work, 'the diversion of effort away from productive farming into rent-seeking; or a lack of social cohesion'. This is only partly true, for several reasons (see too Ó Gráda 1993: 172-4):

First, those tenants who litigated instead of agreeing on a rent reduction won, on average, bigger rent reductions. Given the relatively small costs involved litigation paid.

Second, the more-or-less fixed legal costs associated with litigation must have made it not worthwhile for many small farmers. It is probably more than mere co-incidence that small farms were more common in the north of Ireland where tenants were more likely to settle. In counties Cork and Kerry in the southwest, for example, the proportions of holdings under fifteen acres in 1900 were 23 and 27 per cent; in Cavan and Monaghan in the north (both strong dairying counties) they were 44 and 56 per cent.

Third, tenants who were in arrears with their rent in the 1880s and 1890s were in a particularly poor position to argue, and so their landlord could force them into an out-of-court settlement. To the extent that this was a factor, then AGREE was less about 'social cohesion' or 'social capital' than about landlords being able to blackmail tenants into accepting low rent reductions.

Fourth, it is true that some tenants who settled out of court did so because their rents were low to begin with. But this could be taken as meaning that if more landlords had been reasonable,

more tenants would have 'agreed'.

For all these reasons, *AGREE* is also more about 'economic' than 'cultural' considerations. To simulate 'Danish conditions' in Ireland by setting *AGREE*=1 and *RCSHARE*=0 simply stacks the odds against the Irish farmer.

Finally, O'Rourke employs the Catholic population share (*RCSHARE*) as a proxy for 'other sociological and political attributes in a divided society'. As noted, Plunkett and his supporters implicitly or explicitly blamed aspects of Irish Catholic-nationalist culture for the laggard diffusion of Irish co-operative creameries. Whether this was because Catholics were less trustworthy, ¹⁰ or because they were lazier, or more prone to violence, or less rational, or less able to exercise self-control (as evidenced in their big families), or some combination of the above, is immaterial.

O'Rourke proxies 'Irishness' or 'Irish culture' by the percentage of the population that was Roman Catholic. He hypothesizes that the more Catholic a county, the weaker the embrace of co-operation.

But, again, in the context of creameries and co-operation this variable is arguably a better proxy for poverty than for culture. Why? Because in Ireland non-Catholics owned a disproportionate share of the bigger and better farms. This may be clearly seen from Table 6.3, which describes the situation in the Irish Free State in 1926. Only 7.2 per cent of all farmers were non-Catholic (they would have been mainly members of the Church of Ireland) but they owned 27.5 per cent of the land. Areas with lots of Protestant farms also presumably had higher stocking rates, were less remotely located, and were more likely therefore to be in a position to benefit from the new technology. Indeed, for these reasons *RCSHARE* seems a better proxy for farm capital and land endowment than farm acreage alone.

<Table 6.3 about here>

An alternative, or complementary, interpretation of the tension between 'Irishness' and co-operation, not considered by O'Rourke, is that there was a struggle for power and influence between the Catholic clergy, on the one hand, and the leadership of the co-operative movement, on the other. Plunkett, son of Lord Dunsany, regarded the IAOS as an embodiment of *noblesse oblige*, and indeed his 'first two associates in the New Movement' were Lord Monteagle, a Limerick landlord, and R.A. Anderson, sub-agent to the Cork proprietor, Lord Castletown. In the years that followed, Plunkett and his circle reserved a disproportionate number of the top positions in the movement for landed grandees. In the early years, both Monteagle and Col. Nugent Talbot Everard, a Meath landlord, served brief terms as IAOS president in Plunkett's absence. At the outset (1894-5) seven members of the IAOS executive committee were landed proprietors. In 1900 ten of the twenty-two men serving on the IAOS committee were landlords, and fifteen years later the ratio was still nine to twenty-five. Several others were gentleman farmers. The attitude of such people towards the ordinary farmers and the Catholic clergy (mostly of farming stock) was not devoid of de haut en bas condescension (Plunkett 1904: 184; Anderson 1937: 1, 264-84; Keating 1984: 107-8; Daly 2002: 7-8). Their gloss on things -- and they were voluble propagandists -- should not be taken as the last word. Local histories of individual co-operatives contain their own biases, but their more benign impression of the movement at grass-roots level and of the role of clergy in it offers a useful corrective to the version championed by Plunkett and his coterie.

Those who ran the IAOS may have left the clergy and, indeed, Nationalist Ireland, underrepresented in the leadership, yet at grass roots level priests were heavily involved in creating and
supporting co-operative creameries. Local histories, of which there are many, are quite clear on
clerical support and enthusiasm. Thus a recent history of Monaghan creamery describes how it set up
in 1900 following a large meeting in the town hall, 'attended by local clergy of all denominations and
a very representative band of farmers' (Dunne 1983: 1). The prime movers behind the setting up of

the Ardagh (Co. Limerick) co-op were Edward W. O'Brien and Father Bob Ambrose C.C. One was a unionist landlord, the other the son of a small farmer (Hough 1997: 1-3). A recent history of Callan co-operative records: 'One cannot recapture the excitement and expectation at the Town Hall in Callan on 26 March, 1899, where the parish priest, Very Rev. Canon Howley, presided at a thronged meeting' (McDonnell 2000: 88). In Emly, County Tipperary, the local parish priest was behind the efforts to organize a farmer buy-out of the local proprietary creamery, and priests fulfilled the roles of chairmen and secretaries throughout the area (Jenkins 2000: 43; for further examples see Murtagh 1986; Smith 1998). Given that the catchment area of the early creameries was about the same as that of an average parish, the church offered an excellent spatial template within which to organize. The contrast between priestly leadership at grass roots level and their under-representation at executive level is stark. Carla King has noted that only six of the sixty-nine men who served on the IAOS committee before 1914 were priests (Keating [King] 1984: 109; Plunkett 1904: 92n).

Two further points. First, the claim that the Catholic Irish were poor in Putnamite social capital is difficult to square with the rise of highly innovative mass participation organizations such as the Gaelic Athletic Association and the Gaelic League in this very period. Many of Ireland's local history and archaeological societies also date their beginnings from this period. Indeed it may well be that the 1880-1914 period produced more 'joiners' than any other era in Irish history, before or since. Finally, the productivity results in Tables 6.1 and 6.2 should be recalled here. They imply (a) that agriculture as a whole performed well before the 1920s, and (b) that farmers in the 'Catholic' Irish Free State increased productivity more than their colleagues in the 'Protestant' Northern Ireland between 1912 and 1926. These results seem hard to square with weakness in a sector as important as dairying, or with 'Catholicity' acting as a brake on southern farmers.

Only further research will tell whether related aspects of Ireland's performance – the lower quality of its butter, its failure to produce a proper marketing strategy for dairy products, its failure to

develop an associated cheese-making industry, the knock-on impact of seasonality in dairying on the pigs and bacon sector – strengthen the case for Irish under-performance.

Winter dairying

Irish dairying was 'outdoor' dairying because of cost considerations, not out of perverseness.

Barbara L. Solow (1971: 151n).

Since time immemorial Irish dairy farmers have relied mainly on grass as feed for their cows. This strategy has dictated spring calving and a marked seasonality in the supply of milk. Farmers have shunned the alternative of 'winter dairying', i.e. spacing the births of calves and lactation throughout the year through the stall-feeding of cows during the winter months. Winter dairying would have entailed both higher milk output and a more regular supply of butter to wholesalers and retailers in Great Britain. More milk in turn would have entailed more creameries and therefore, perhaps, more co-operation. The alternative would have been costlier, though in mitigation lower seasonality would presumably have increased the price commanded by Irish butter of any given quality in British wholesale and retail outlets. Cartoon 6.1 implies that part of the Irish dairy farmer's problem with winter dairying was sheer laziness.

The seasonality of Irish milk supplies has not changed much over time. Figures 6.1 and 6.2 compare the monthly shares of butter supplies to the Cork Market in 1875 and 1885, and the seasonality of milk supplies in 1934, 1950, 1975, and 1998 (see too Jenkins 2000: 8). While the pattern is broadly similar in all years, the supply of butter in the late nineteenth century was proportionately less early in the year, and greater in the autumn, than the supply of milk in the twentieth. Note too that there was some tendency for the seasonality to

intensify up to 1950; since then it has lessened slightly. But the main implication is that winter dairying never really caught on in Ireland.

In an era of profound change and dynamism in nearly all other aspects of Irish agriculture, this persistence of seasonality suggests that earlier criticisms of farmers for not switching were misplaced. The reason is not far to seek: Ireland's temperate climate and extended grass-growing season allow its cattle to roam its pastures at relatively low cost for eight or nine months of the year. Denmark's climate, though mild compared to that of landlocked regions of western Europe, is harsh relative to Ireland's (Freeman 1969: 44-52; Jensen 1937: 62-72). Comparing mean monthly temperatures in Ireland and Denmark highlights the former's advantage in this respect (Figure 6.3). The annual averages are not too different (9.6°C in Dublin, 8.2°C in Copenhagen), but in Denmark the monthly variation, represented by the coefficient of variation, is much greater (0.82 versus 0.40). The example of New Zealand, with its equally temperate and rainy climate, and very long grass-growing season, clinches the case. 11 There the mean temperature was a bit higher than Ireland's (11.9°C) but coefficient of variation was about the same. The seasonality of Ireland's milk supply was and is very much like New Zealand's turned upside down (Figure 6.4). Nobody has ever accused New Zealand farmers of the laziness, fractiousness, or Catholicity imputed to Irish farmers. Ireland's comparative advantage in grass is the most plausible explanation of both the sharp seasonality in its milk supply and the sluggish performance of its dairying sector.

<Figures 6.1 to 6.4 about here>

Though exhortations to practice winter dairying persisted for decades, convincing empirical evidence in its favor has been lacking. Nor was there ever a time when even a minority of progressive farmers made the switch and grew rich as a result. Trials in the 1900s by the Irish

Department of Agriculture were inconclusive. In its 1906-7 annual report the IAOS conceded that winter dairying would require a milk price of 5½d per gallon, at a time when farmers were being paid only 3½d per gallon for their milk (IAOS 1908: 7). In the early 1920s Joseph Hanly's popular textbook supported winter dairying in principle, but conceded that the case for it had not yet been convincingly made. The claims and counterclaims would continue, with Joseph Johnston issuing 'a plea for winter dairying', and Raymond Crotty insisting that trends in the relative costs of beef and butter and the higher cost of non-feed inputs in Ireland argued against the winter dairying option (Hanly 1924: 409-18; Johnston 1931; Crotty 1966: 72-7; Solow 1971: 151n). But the very persistence of seasonality and the example of New Zealand indicate that the resistance of Irish farmers to winter dairying was quite sensible. To paraphrase John Maynard Keynes, they presumably knew more about the economics of farming that its proponents did.

Conclusion

The settlement of the Irish land question in the 1900s involved the transfer of land ownership from ten thousand or so landed proprietors, mainly Protestant and Unionist in politics, to half a million or so mainly Catholic and Nationalist landholders. The landlords were compensated out of public funds, while the former tenants undertook to pay their share to the British Treasury in the form of land annuities. In due course, the new landowners would contribute much to the conservative ethos and political leadership of independent Ireland. The settlement abolished one kind of inequality, but left another largely untouched. The highly unequal size distribution of farms meant that a minority of 'strong' farmers were the main winners of the Land War. It would be left to the new state to deal with the structural problem of unviable and impoverished holdings, particularly in the west of Ireland.

Irish anti-landlord rhetoric, much like abolitionist rhetoric in the antebellum United States,

held that what it opposed was both unjust and inefficient. The pro-landlord response, in turn, echoed that of the southern slave-owners and their allies: Irish farmers were unfit to manage Ireland's land endowment alone. This pro-landlord line was an agrarian version of the Unionist premise that Ireland was incapable of competent self-government. Horace Plunkett was a moderate Unionist of landlord stock, and his critique of Catholic Ireland was influenced by such thinking. His sense that Irish farmers were 'failing' in their struggle against their Danish rivals reflected a belief that the Catholic Irish required guidance and prompting from their superiors.

Since the 1970s several historians have effectively debunked a neo-abolitionist historiographical tradition that highlighted the greed and venality of the Irish landlord class (Solow 1971; Vaughan 1994). Turning that tradition on its head, these historians implied that the demise of the landlords hurt Irish agriculture. This chapter takes a different tack, suggesting that even 'good' landlords were economically dispensable. Our review of farm output estimates suggested that the revolution in land tenure cost little or nothing in terms of overall productivity foregone. Our reappraisal of the Horace Plunkett view that Irish farmers were unduly unenthusiastic about creameries, co-operation, and winter dairying found that there were good reasons for their lack of enthusiasm.

Bibliography

- Aage Hansen, S. (1984) Økonomisk vaekst i Danmark 1720-1914, Copenhagen: Økonomisk Institut.
- Anderson, R.A. (1937) With Horace Plunkett in Ireland, London: Macmillan.
- Banking Commission (1938) *Commission of Inquiry into Banking, Currency and Credit: Reports*, Dublin: Stationery Office.
- Beddy, J.P. (1943) "A comparison of the principal economic features of Eire and Denmark," *Journal of the Statistical and Social Inquiry Society of Ireland*, 27: 189-220.
- Bjorn, C. (1982) 'Dansk mejeribrug 1882-1914', in *id*. (ed.), *Dansk mejeribrug 1882-2000*, Odense: de danske Mejeriers Faellesorganisation.
- Boyle, G. (1992) Contribution to National Economic and Social Council, *Impact of Reform of the Common Agricultural Policy*, Dublin: NESC.
- Crotty, R.D. (1966) Irish Agricultural Production, Cork: Cork University Press.
- Daly, M.E. (2002) *The First Department: A History of the Department of Agriculture*, Dublin: Institute of Public Administration.
- Dunne, Gerry (1983). Town of Monaghan Co-op: The First Eighty Years, Monaghan: R. & S.
- Eiríksson, A. and Ó Gráda, C. (1996) "Bankrupt landlords and the Irish famine," UCD Centre for Economic Research Working Paper 96/10.
- Freeman, T.W. (1969) *Ireland: A General and Regional Geography*, 4th ed., London: Methuen.
- Foreman-Peck, J. and Lains, P. (2000) "European economic development: the core and the periphery, 1870-1910," in S. Pamuk and J.G. Williamson (eds), *The Mediterranean Response to Globalisation before 1950*, London: Routledge.
- Hancock, W.N. (1851) Is there Really a Want of Capital in Ireland?, Dublin: Hodges & Smith.
- Hanly, J. (1924) *Mixed Faming: A Practical Text Book of Irish Agriculture* $(2^{nd} ed.)$, Dublin: Dealy, Briars, & Walker.
- Hough, J. (1997) *Ireland's Co-operative Heartland: Ardagh C.D.S. A History 1891-1974*, Limerick: Treaty Press.
- IAOS (1905). Report for 1903-4, Dublin: IAOS.
- IAOS (1908) Report for 1906-7, Dublin: IAOS.
- Jenkins, W. (1995) "The origin and development of the creamery system in South Tipperary,"

- unpublished M.A. dissertation, National University of Ireland. - (2000) Tipp Co-op, Origins and Development of Tipperary Co-operative Creamery, Dublin: Geography Publications. Jensen, Einar (1937). Danish Agriculture: Its Economic Development, Copenhagen: J.H. Schultz Verlag. Johnston, J, (1931) "A plea for winter dairying," Journal of the Statistical and Social Inquiry Society of Ireland, 17: 33-44. Keating [King], C.R. (1984) "Sir Horace Plunkett and Rural Reform 1889-1914," unpublished Ph.D. dissertation, National University of Ireland. Kennedy, L. (1996) Colonialism, Religion and Nationalism in Ireland, Belfast: Institute of Irish Studies. McDonnell, N. (1999) Callan Co-operative Agricultural and Dairy Society Ltd. 1899-1999, Kilkenny: Callan Co-operative Agricultural and Dairy Society. Mokyr, J. and Ó Gráda, C. (1996) "Heights and living standards in the United Kingdom 1815-1860," Explorations in Economic History, 33: 141-68. Murtagh, M. (1986) *Proud Heritage: the story of Imokilly Co-op*, Dublin: Belbulben. Ó Gráda, C. (1977) 'The beginnings of the Irish creamery system', *Economic History Review*, 25: 284-305. – (1991) "Irish agriculture north and south since 1900," in B. Campbell and M. Overton (eds), Land, Labour and Livestock: Historical Studies in European Agricultural Productivity, Manchester: Manchester University Press. (1993) Ireland Before and After the Great Famine, 2nd edn, Manchester: Manchester University Press. (1994) Ireland: A New Economic History 1780-1939, Oxford: Oxford University Press. -- (1997) A Rocky Road: the Irish Economy since the 1920s, Manchester: Manchester
- ——— (1999). Black '47 and Beyond: the Great Irish Famine in History, Economy, and Memory, Princeton: Princeton University Press.

University Press.

- O'Rourke, K. (2001) 'Culture, politics and innovation: evidence from the creameries', Centre for Economic Policy Research Working Paper no. 3235.
- O'Shea, Mary (2001). *One Hundred Years of Pilltown Co-operative and its Branches*, Piltown: Piltown Co-operative Society.

- O'Toole, F. (1999) "DIRT inquiry illuminates a sectarian stereotype," *Irish Times*, 15 October 1999.
- PDSÉ (Parliamentary Debates Seanad Éireann) (1939) Vol. 22 (7 June 1939), paragraphs 1708-64
- Smith, R. (1998) *The Centenary Co-operative Creamery Society, Ltd.: A Century of Endeavour, 1898-1998*, Dublin: Mount Cross.
- Solar, P.M. (1998). "The pitfalls of estimating Irish agricultural output for post-famine Ireland," *Irish Economic and Social History*, 25: 152-6.
- Solow, B.L. (1971) *The Land Question and the Irish Economy*, Cambridge, Mass.: Harvard University Press.
- Plunkett, H. (1904). *Ireland in the New Century*, London: John Murray.
- Turner, M. (1996) *After the Famine: Irish Agricultural Production 1850-1914*, Cambridge: Cambridge University Press.
- ——— (2000) "Agricultural output, income and productivity," in E.J.T. Collins (ed.), *The Agrarian History of England and Wales 1850-1914*, vol. 7(1), Cambridge: Cambridge University Press.
- Vaughan, W.E. (1994) *Landlords and Tenants in Mid-Victorian Ireland*, Oxford: Oxford University Press.
- West, T. (1986) *Sir Horace Plunkett: Co-operation and Politics, an Irish Biography*, Gerards Cross, Bucks.: Colin Smythe.

18
16
14
12
10
10
8
6
4
2

FIGURE 6.1. MONTHLY SUPPLY TO CORK BUTTER MARKET, 1875 AND 1885

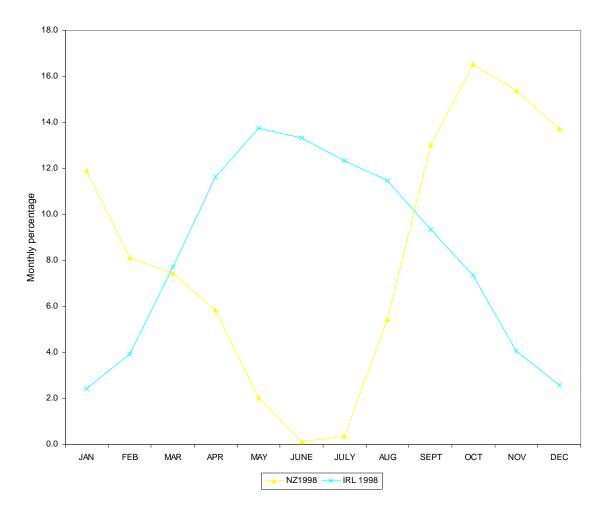
Source: Calculated from market reports in the Irish Farmers' Gazette

18.0 16.0 14.0 12.0 Monthly percentage 10.0 8.0 6.0 4.0 2.0 0.0 OCT NOV JAN FEB MAR APR MAY JUNE JULY AUG SEPT DEC -IRL 1998 - - IRL 1975 - - IRL1934 - - IRL 1950

FIGURE 6.2. MILK SUPPLY TO CREAMERIES 1934-1998

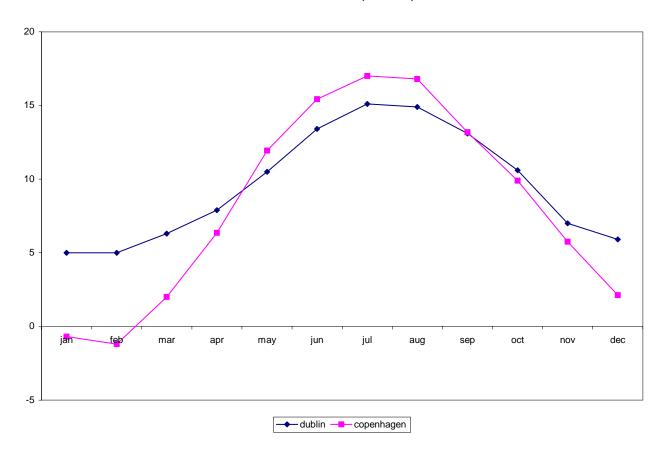
Source: Central Statistics Office, Dublin.

FIGURE 6.3. IRISH AND NEW ZEALAND MILK SUPPLIES



Sources: Central Statistics Office, Dublin, and New Zealand Ministry of Agriculture and Forestry.

FIGURE 6.4 MEAN DAYTIME TEMPERATURE IN DUBLIN AND COPENHAGEN (celsius)



Sources: Central Statistics Office, Dublin, and http://ph70.rz.uni-

karlsruhe.de/~bh28/klima/tkopenha.html

TABLE 1: TOTAL FACTOR PRODUCTIVITY CHANGE 1850s-1910s

(per cent per annum)

	[1]	[2]	[3]
1850s-1870s	0.58	0.54	0.55
1870s-1890s	0.42	0.43	0.42
1890s-1910s	0.81	0.83	0.79

Source: Turner (1996: 138)

using starting decades for factor shares using finishing decades for factor shares using fixed factor shares

TABLE 2: OUTPUT AND PRODUCTIVITY IN 1912 AND 1925-6

	26 Cos.	6 Cos.	All Ireland
A. 1912			
Livestock (£m.)	37.2	8.0	45.2
Crops (£m.)	10.1	4.8	14.9
Total (£m.)	47.3	12.8	60.1
Labor force (1000)	765	212	977
Output per worker (£)	62	60	60
Land (*) (m.)	10.67	2.52	13.19
Q/Land	4.4	5.1	4.6
В. 1925-6			
Livestock (£m.)	48.4	11.8	60.2
Crops (£m.)	11.1	3.2	14.3
Total (£m.)	59.6	15.0	74.5
Labor force (1000)	648	199	847
Output per worker (£)	92	75	88
Land (*) (m.)	10.67	2.52	13.19
Q/Land	5.6	6.0	5.7

Source: Ó Gráda 1991: 444; Crotty 1966: 303.

^(*) Land quality proxied by Poor Law Valuation.

Table 6.3: Non-catholic farmers as a percentage of total, 1926

FARM SIZE (acres)	IRELAND	LEINSTER	MUNSTER	CONNACHT	ULSTER (*)
1-5	2.4	3.9	1.9	0.8	3.4
5-10	2.9	3.9	1.5	0.7	7.3
10-15	3.9	3.9	1.5	1.0	11.4
15-30	5.5	5.0	1.7	1.4	19.1
30-50	7.8	7.5	2.4	3.6	30.4
50-100	10.2	11.9	3.8	8.5	42.6
100-200	15.4	20.4	7.6	15.4	48.9
200+	27.5	38.0	16.4	23.1	38.4
TOTAL	7.2	9.9	3.6	2.5	19.6

(*) Cavan, Donegal, Monaghan

Source: 1926 Irish Free State census of population

Notes

An earlier version of this paper was presented at the first meeting of the Agricultural History Society of Ireland, Belfast, January 2003. Support from the Business Research Programme, University College, Dublin expedited the research. My thanks to Niall Ó Ciosáin and to the editors for useful comments.

_

¹ Much of W.E. Vaughan's *magnum opus* (Vaughan 1994), built on research carried out in the early 1970s, is very corroborative of Solow. My own estimates of total factor productivity change in 1854-76 and 1876-1908 seemed to run counter to the implication of 'a turning point (for the worse) in the fortunes of Irish agriculture around the 1870s' (1993: 153).

² The difference in terms of buildings was trivial but, at least c. 1910, Northern farmers had more machinery at their disposal (Ó Gráda 1991: 444-6).

³ Land's rather generous factor share biases the outcome in the six counties' favour.

⁴ My thanks to Ingrid Henriksen for these data.

⁵ National Archives of Ireland: Department of An Taoiseach, S12830.

⁶ National Archives of Ireland: Department of An Taoiseach, S15465(B).

⁷ For an effective rebuttal of the claim that the Catholic Church retarded Irish economic growth in the nineteenth century see Kennedy (1996: Ch. 4).

⁸ It also bears remembering that in certain parts of Denmark proprietary creameries still accounted

for a significant share of the total milk supply in the 1900s. In North Jutland they took 23.6 per cent in 1909, and in Lolland-Falster they took 22.4 per cent. See Bjorn (1982: 174).

- ⁹ Already by 1907 the IAOS was claiming that saturation point had been reached: 'the available dairying ground in Ireland is pretty well occupied by co-operative and proprietary concerns' (IOAS 1908: 5). A few years earlier dozens of prospective co-operatives, mostly in marginal locations, were dissolved, never having proceeded beyond the planning stage (IAOS 1905).
- ¹⁰ A recent contribution by a well-known Irish journalist resurrects the stereotypes of 'the honest, dutiful, upright Prod and the wily, shifty, untrustworthy Tague'. See O'Toole (1999).
- ¹¹ For this reason, New Zealand offers a better comparative yardstick for Irish farmers than Denmark.