Bonds without Bondsmen: Tenant-Right in Nineteenth-Century Ireland

TIMOTHY W. GUINNANE AND RONALD I. MILLER

Tenant-right, or a tenant’s right to sell his holding, was one of the most puzzling institutions of nineteenth-century Irish land tenure. Historians have argued that the institution reflects the tenants’ assertions of a proprietary interest in the land, an assertion often backed up by threats and violence. In this article we argue that landlords respected tenant-right because they could profit from the institution. Our model reflects comments by contemporaries and explains that tenant-right functioned as a bond against nonpayment of rent and was part of a rational landlord’s income-maximizing strategy.

Tenant-right was perhaps the most famous and vexatious land-tenure institution in nineteenth-century Ireland. Under tenant-right an Irish tenant without a lease could sell the right to occupy his holding to an incoming tenant. As contemporaries appreciated and as historian Barbara L. Solow argued in her pioneering study, the magnitude of tenant-right payments implied that tenants were selling the capitalized value of the right to pay the landlord less than the full Ricardian rent. Landlords and tenants in Ireland had reason to care about tenant-right, but the institution’s influence went far beyond these groups. Tenant-right was always a key facet of the land-tenure issues that dominated much of nineteenth-century Irish politics, and Ireland’s land debates often dominated British politics. As one member of Parliament observed, “the Irish Land Question has probably engaged the attention of Parliament more than any other subject during the last thirty years.”

Historians have proposed two explanations for tenant-right. Some view tenant-right as a simple bribe to purchase immunity from agrarian violence. Landlords could not, according to this view, charge the full Ricardian rent without risking personal assault or damage to property. This explanation was proposed in 1843 by the Devon Commission, which investigated landlord-tenant relations in Ireland. According to the commission, tenant-right was “in the great majority of cases . . . a mere life insurance or purchase of immunity from outrage.” Other historians view

Timothy W. Guinnane, Department of Economics, Yale University, Box 208269, New Haven, CT 06520-8269. Ronald I. Miller, Department of Economics, Columbia University, New York, NY 10027.
For comments we thank William Baumol, Ben Bernanke, Doug Bernheim, David Card, Avinash Dixit, Martin Dowling, William English, William Jordan, Joel Mokyr, Cormac Ó Gráda, T. N. Srinivasan, William Sundstrom, William Vaughan, participants in seminars at Berkeley, Princeton, Stony Brook, and Yale, and anonymous referees.
1 MacClagan, Land Culture, p. 1.
2 Devon Commission, Digest, p. 2.
tenant-right as reflecting deeply imbedded notions about land and property rights in land. According to this view, Irish tenants believed that their occupation of the soil by itself implied some degree of property rights and so denied their landlords the right to charge the full Ricardian rent. This view, given full credence by John E. Pomfret in his influential but now-dated work, still finds its echoes in modern research. Both of these explanations view the landlord as acceding to a practice because to challenge it would bring protest and perhaps violence.

Our explanation is different. Although it may be true that Irish tenants had strong proprietary feelings toward their land, this does not explain the willingness of landlords to reduce rents to the point where tenant-right gained significant value. Our model implies that landlords had their own reasons for agreeing to the custom: tenant-right made rents easier to collect than would otherwise have been the case. Arrears of rent were a first claim on the purchase money for any outgoing tenant. Thus landlords respecting tenant-right were assured of receiving their back rent from failed tenants. Perhaps more importantly, the institution improved the selection of tenants. No sitting tenant had an incentive not to pay his rent, since each tenant owning tenant-right knew that any arrears would simply reduce the value of his holding. That is, tenant-right was a security deposit, albeit one with unusual distributional and risk-sharing consequences. Why did Irish landlords rely on this form of bond rather than an explicit security deposit posted by the tenant? The answer, we argue, lies in problems of enforcement and verification. Tenant-right does not entail most of the moral-hazard problems implicit in a conventional security deposit.

More than a few contemporaries understood tenant-right as security for rent. Writing in the 1860s, journalist Henry Coulter argued that tenant right is

acquiesced in and encouraged by many agents and landlords because they look on it as the best security they can have for the payment of rent. If a tenant should fall into arrear, and be evicted from his farm, he is still allowed to sell his "good will," and the arrear or rent and all his just debts are liquidated out of the purchase money, otherwise the landlord will not allow the transfer to be made. Our model formally implies that a landlord would want to create tenant-right where it had not existed before, but we view our argument primarily as an explanation for the lack of landlord opposition to the institution. The article supports this interpretation of tenant-right in two ways. First, we argue that the earlier explanations of tenant-right are inconsistent with simple logic and with the available evidence. Second, we show that our explanation of tenant-right accounts for some otherwise puzzling features of landlord-tenant relations in nineteenth-century Ireland apart from the operation of the basic institution.

3 Pomfret, Struggle, pp. 50–51.
4 Coulter is quoted in Ó Gráda, Ireland, p. 128. Ó Gráda notes that our interpretation of tenant-right was advanced by several nineteenth-century observers.
For decades landlord-tenant relations held pride of place in any study of nineteenth-century Irish economic history. Economic historians such as George O’Brien traced most economic evils to Ireland’s land system and credited Ulster’s relative prosperity to supposed peculiarities of land tenure there. Recent research has not been kind to this approach. Economic historians now largely agree with Louis Cullen’s assertion that “landlords are not central to the story”—more important for Irish economic history are the day-to-day decisions of farmers, laborers, and others on the ground. The land system’s demotion from center stage reflects an appreciation that Irish agriculture turned in a respectable if uneven performance in the period between the Great Famine of the 1840s and World War I, and that when it did not, landlords were not the only culprits. Even if the Irish agricultural economy had been as bad as once portrayed, would it be reasonable to assert that the land-tenure system was at fault? In discussing land-tenure prior to the Famine, Joel Mokyr noted that tenancy systems are themselves largely endogenous: rather than view the Irish system as a costly arrangement imposed from without, we should look for the forces within the Irish economy that gave rise to and supported the institutions we observe.

This article is primarily an analytical exercise grounded in the operation of tenant-right as revealed in parliamentary and secondary sources. Aspects of our argument can be tested empirically, but meaningful tests require intensive use of manuscript sources for reasons discussed below. Tenant-right was widely discussed in the nineteenth century. Recent scholarly attention has considerably advanced our knowledge of the institution. The interested reader is referred especially to Martin Dowling’s Ph.D. dissertation. His thesis is in scope and method very different from this article but promises to be a standard work on tenant-right for many years to come. Dowling is more concerned than we with the origin and significance of the term tenant-right. Moreover, he stresses the role of colonial settlement in the institution’s history, more or less rejecting a role for economic theory in explaining tenant-right. Even efforts as careful and thoughtful as Dowling’s cannot portray a complete picture of tenant right, however, because the very informality of the custom meant it took different forms at different times and in different places.

The central weakness of previous explanations of tenant-right is their implication that this institution reduced the costs of landholding for Irish peasants. This is not true, as Lord Dufferin told his tenants at a dinner in 1865. With tenant-right, the farmer effectively paid two rents, one to the landlord and a second to cover the cost of capital invested in tenant-right.

---

5 O’Brien, Economic History; and Ó Gráda, “Irish Agricultural History.”
6 Mokyr, Why Ireland Starved, chap. 4.
7 Dowling, “Tenant Right.”
8 Lord Dufferin’s remarks are quoted in Vaughan, Landlords and Tenants in Mid-Victorian Ireland, p. 72.
The old view of tenant-right is also unable to explain two important features of Irish tenancy. First, post-Famine Ireland's ejectment rates were very low. Our model explains low ejectment rates as a consequence of a rent-collection system based on tenant-right. Second, some Irish landlords refused to tolerate tenant-right but found their tenants making surreptitious payments just as with landlords who did respect tenant-right. Such landlords worked hard to suppress these under-the-table tenant-right payments. Our model explains why such payments might arise and why landlords would try to suppress them, even though the payments were from one tenant to another and ostensibly cost the landlord nothing.

Our theory belongs to the class of principal-agent problems in which it is optimal for the principal to refrain from attempting to extract all of the surplus from the agent. By doing so the principal makes the relationship more valuable to the agent and may improve the selection of potential agents, the agent's incentives, or both. Models of this sort are now common in economics and economic history. Nineteenth-century Ireland was not the only time and place in which landlords charged rents that were less than Ricardian rents. Landlords have often maintained low rents to keep good tenants. Yet tenant-right differs considerably from many arrangements in which principals act to give the relationship value. Landlords created this goodwill by keeping rents below their Ricardian level, but incoming tenants purchased that goodwill at a price approximating the value of the rent foregone by the landlord. This makes the distributional and moral-hazard implications of tenant-right distinctive.

**HISTORICAL BACKGROUND**

For our purposes Irish land law falls into three periods. Before 1870 tenant-right was respected on many Irish estates but lacked any statutory basis. Tenant-right had nearly universal respect in the province of Ulster (thus one of its names, "Ulster Custom") and was widespread elsewhere in Ireland. The Land Acts of 1870 and 1881 changed the fundamentals of landlord-tenant relations in two ways. The 1870 Act confirmed in law the Ulster Custom where it was found to have existed before that year. The 1881 Act established procedures whereby landlords were forced to let land at fair rents. Since fair rents were by definition less than rack-rents (Ricardian rents), rent control guaranteed the value of tenant-right. We focus on the period before 1881, when tenant-right was not guaranteed by statute.9

Prior to the Land Acts some tenants in Ireland had leases, but most were either yearly tenants or tenants-at-will. Although a yearly tenant might hold the same land for decades, the tenancy could be ended upon six

---

months notice by either party. English observers were often dismayed at the prevalence of yearly tenancies in Ireland. Table 1 summarizes the distribution of tenancies of each type for 1870, the first year in which that information is available. In that year, yearly tenancies were the large majority of poor tenants but only a minority of the large farms. Yearly tenancies had become more common after the Famine.

Ownership of land in Ireland was enormously concentrated even after the Incumbered Estates Act broke up some large estates that had become insolvent during the Famine of the 1840s. In 1876 78 percent of all land was owned by proprietors with 1,000 acres or more. The size of Irish estates led to two management practices harshly criticized by outsiders. During the eighteenth century many estates had been let out in large tracts on long leases to middlemen who re-let the land to farmers large and small. Many Irish landlords delegated control over their estates to land agents whose primary interest was the collection of rent rather than management of the land. In 1847 the Devon Commission found that “nearly all witnesses concur in considering the duties of an agent to be extensive and most important in their nature; but a large majority state that the collection of rent is the chief duty, and many, that it is the only duty generally fulfilled”. Historian James S. Donnelly reached a similar conclusion concerning estate agents in County Cork.

Ejectment of a tenant for nonpayment of rent, or to effect a “clearance”

---

**Table 1**

YEARLY TENANCY, 1870

<table>
<thead>
<tr>
<th>Valuation Category</th>
<th>Ulster</th>
<th>Munster</th>
<th>Leinster</th>
<th>Connaught</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than £15</td>
<td>86.35</td>
<td>72.35</td>
<td>81.28</td>
<td>90.06</td>
<td>83.76</td>
</tr>
<tr>
<td>£15 to £30</td>
<td>72.85</td>
<td>56.36</td>
<td>67.99</td>
<td>72.18</td>
<td>67.12</td>
</tr>
<tr>
<td>£30 to £50</td>
<td>62.65</td>
<td>46.75</td>
<td>54.77</td>
<td>57.06</td>
<td>54.83</td>
</tr>
<tr>
<td>£50 to £100</td>
<td>50.28</td>
<td>36.85</td>
<td>39.33</td>
<td>41.53</td>
<td>41.16</td>
</tr>
<tr>
<td>£100 and more</td>
<td>31.86</td>
<td>21.79</td>
<td>22.31</td>
<td>28.84</td>
<td>24.40</td>
</tr>
</tbody>
</table>

Holdings of Each Size as a Percentage of All Holdings

<table>
<thead>
<tr>
<th>Valuation Category</th>
<th>Ulster</th>
<th>Munster</th>
<th>Leinster</th>
<th>Connaught</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than £15</td>
<td>77.48</td>
<td>65.86</td>
<td>65.25</td>
<td>89.53</td>
<td>75.06</td>
</tr>
<tr>
<td>£15 to £30</td>
<td>14.76</td>
<td>17.54</td>
<td>16.45</td>
<td>5.98</td>
<td>13.79</td>
</tr>
<tr>
<td>£30 to £50</td>
<td>4.80</td>
<td>8.49</td>
<td>7.97</td>
<td>2.03</td>
<td>5.65</td>
</tr>
<tr>
<td>£50 to £100</td>
<td>2.25</td>
<td>5.84</td>
<td>6.08</td>
<td>1.52</td>
<td>3.64</td>
</tr>
<tr>
<td>£100 and more</td>
<td>.81</td>
<td>2.27</td>
<td>4.26</td>
<td>.94</td>
<td>1.86</td>
</tr>
</tbody>
</table>

*Source: United Kingdom, “Return.”*
of small farms to create a larger farm, was a powerful image in Irish politics. Solow noted the inconsistency of this image and the low ejectment rate in post-Famine statistics. The confusion over evictions may be related to practices intended to collect rent. Some tenants were formally evicted but readmitted to the holding as caretakers. Echoing Solow, William Vaughan found that after the early 1850s, fewer than one thousand families were really evicted in any one year except in crisis years. The 1860s only saw eight thousand evictions and another thousand or so houses leveled in all of Ireland.

The great difficulty that landlords experienced in enforcing rental payment is critical in explaining tenant-right. Robert Russell recounts stories of estate agents following tenants to market to obtain the rent directly after sale of livestock. A landlord had no legal recourse until rent had gone into arrears by a year or more, after which he could bring an action for ejectment in the Civil Bills Court. Even when the action was granted the tenant had a period in which he could pay the arrears and redeem his interest. Thus serving a “notice to quit” was a threat and did not necessarily reflect a landlord’s desire to be rid of the tenant. Of the 9,600 families “evicted” in the 1860s, for example, some 1,600 were readmitted to the holding. A related victim of revisionist thinking is the notion that Irish landholders felt insecure in their holdings. The existence of tenant-right on holdings lacking leases is by itself evidence that Irish tenants understood that any new landlord was likely to respect existing arrangements. The Devon Commission asked witnesses whether the form of tenure—lease, yearly tenancy, and so forth—affected the value of tenant-right. The answer was almost always no, even outside of Ulster, and the Commission concluded that tenant-right extended to yearly tenancies. Witnesses before the Bessborough Commission in 1881 showed no enthusiasm for leases. The commission, which was appointed to investigate the workings of the Land Act of 1870 and to consider further changes in Irish land tenure, concluded that “tenancies from year to year existed for generations and descended from father to son. Tenants regarded them almost as a perpetual interest, and on this ground small tenants preferred them to leases.”

TENANT-RIGHT

Some accounts trace tenant-right’s origins to the plantation of Ulster. Settlers were promised that the rent would not be raised on any wastelands they reclaimed and that landlords would permit them to sell their holdings

---

15 Vaughan, _Landlords and Tenants in Mid-Victorian Ireland_, appendix 1.
17 Vaughan, _Landlords and Tenants in Mid-Victorian Ireland_, appendix 1.
19 Solow, _Land_, pp. 52–53.
Tenant-Right in Nineteenth-Century Ireland

The Devon Commission concluded that tenant-right values bore little or no relation to improvements: "the tenant is able to obtain a high rate of purchase for his good-will where he has effected no improvements, or has even deteriorated his farm." Other contemporaries stated more explicitly that tenant-right payments reflected the difference between a rack-rent and the fair rent at which land was actually let. Dowling gives an example drawn from the work of George Joyce, agent for Lord Mountcashel. A tenant had asked Joyce for a rent reduction, and Joyce noted that the farm could already be sold for £100. Joyce concluded that the tenant was not being charged too much, and might have been intending to sell the farm, wanting the reduced rent to increase the value of his tenant-right. Ireland's tenant-right must be distinguished from two other, more easily understood practices. English tenants could also sell the profit-rent when long leases locked in rents lower than current market rates and could demand compensation from an incoming tenant for investments in crop rotations that would bear fruit after the old tenant had left.

20 Fitzgibbon, Land Difficulty, p. 48; and Montgomery, History, pp. 120–21. An institution such as tenant-right that is both customary and controversial will be especially hard to define to anyone's satisfaction. The account in this section agrees in the main with recent discussions (such as Donnelly, Landlord; and Vaughan, Landlords and Tenants in Mid-Victorian Ireland), but we emphasize elements not stressed by others. The point of this section is to describe the primary features of the institution as it relates to our argument—both the features of tenant-right on which we focus and features that would seem at variance with our model—not to provide a complete description.


22 Maguire, Downshire Estates, pp. 143–44, 147.

23 See, for example, the testimony of John Patrick Moloney of Clare, United Kingdom, "Evidence," part 2, Q41–43, p. 653.


25 Devon Commission, Digest, p. 291.


27 Baxter, Irish Tenant-right Question, pp. 10–12.
case most tenants lacked leases, at least after the Famine, and the value of crop rotation was insignificant relative to tenant-right payments.  

How valuable was tenant-right? Prices were usually quoted in “years purchase.” If a farm’s tenant-right was valued at £100 and the occupier paid £25 per year in rent to the landlord, the farm was said to sell for 4 years purchase. The sources unfortunately do not present systematic surveys, although most accounts, such as Dowling’s, find that tenant-right values depended on many factors, including changes in agricultural prices. Many sober assessments place the value of tenant-right between four and six years purchase before the Famine. Some listings of tenant-right purchases from the 1870s—after a long period of moderate rent increases and hefty agricultural price increases—show the average number of years purchase well in excess of 15 years.  

William Bence Jones, a County Cork landlord, claimed that 10 years purchase was “ordinary and moderate,” and 20 years purchase not unknown. The number of years purchase can be converted to an assessment of the difference between the actual and Ricardian rent using the following identity:

$$\text{Years purchase} \times \text{Landlord's rent} = Y(1 - \beta)Q = \beta Q / i \quad (1)$$

where $Y$ is the number of years purchase, $Q$ is the Ricardian rent, $\beta$ is the fraction of the Ricardian rent capitalized into the tenant-right, and $i$ is a discount factor. Rearranging, we find

$$\beta = iY / (1 + iY) \quad (2)$$

For example, a landlord whose holdings sold for 6 years purchase was foregoing 15 percent of the Ricardian rent, assuming a discount factor of 3 percent.

**TENANT-RIGHT AND ENFORCEMENT**

All sources agree on one feature of the sale of tenant-right: its relation to arrears in rent. A new tenant was required to pay any arrears owing from the previous tenant. As Jones explained, “the purchaser paid his money into the landlord’s office; the arrears were taken out of it, and the balance handed to the out-going tenant.” The Devon Commission’s informants cited this as one reason the system was favored by some landlords: “in most cases the outstanding arrears of rent due by the vendor are paid by the purchaser of the tenant-right, and by him deducted from

---

28 Maguire, *Downshire Estates*, p. 143, cites an example where an Irish leaseholder sold the profit-rent of his lease. He correctly argues that tenant-right in Ireland collapsed profit-rent into the right to pay less than the Ricardian rent. Perkins, “Tenure,” discusses an institution called “tenant-right” in Lindsey, England, during roughly the same period. This tenant-right was limited to compensation for unexhausted improvements.

29 Dun, *Landlords*, pp. 130, 142.


the purchase money . . . some proprietors advocate the system, as thus
affording them a security for the rent.”

Donnelly concluded that
tenant-right “fully protected them [landlords] from the loss of arrears of
rent, which were always deducted from the premium paid for the
goodwill.”

Even a landlord fervently opposed to the system could see its
virtues. Jones was a bitter foe of the practice, but even he concluded that
“tenant-right is liked by [estate] agents, because it greatly lessens their
trouble in collecting rents and getting rid of bad tenants, who must be
turned out.”

Landlords set a rent below the Ricardian rent, creating an
excess demand for tenancies that was rationed by the sale of tenant-right.
As a result of this below-market rent, tenants had little to gain by failing
to pay their rents. Consider a tenancy bought for \( Y \) years purchase. If a
landlord can successfully eject a tenant for nonpayment in fewer than \( Y \)
years, then the tenant has nothing to gain by not paying his rent. The
arrears on the holding will simply come out of the tenant-right.

In Dowling’s view public and enthusiastic approval of tenant-right
among landlords or estate agents was “rare and unpopular.” But tenant-
right was seen, however reluctantly, as the best choice among a bad set of
alternatives. According to Dowling, “the regulation of tenant right was an
unwelcome necessity only because it proved to be a more flexible and
adaptable method of management than its alternatives. Let us examine
two such alternatives: the distraint of goods and the eviction of tenants.
The evidence, as we shall see, is fairly clear: these tools of management
were blunt, overly antagonistic, expensive, and ineffective.”

Dowling proceeds to document the drawbacks and costs associated with distraint
and ejectment. Estate agents came to a more positive view of tenant-right
as part of a process of learning about the problems involved in these
alternatives. He concludes that “the impression one receives in reading
through the correspondence of Ulster estates is that as agents began to
discover the technicalities, difficulties, and inadequacies of distraint and
ejectment, they were simultaneously discovering something else: the
practice of the custom of tenant right on their estate, while it posed a
definite threat to their perceived property rights, held out for them the
potential of more effective management.”

The significance of this aspect of tenant-right has received insufficient
attention from earlier historians. In return for letting land for less than the
Ricardian rent, landlords reduced their problems with tenants who did not
pay their rents at all.

There were two distinct mechanisms at work. First,

32 Devon Commission, Digest, p. 291.
33 Donnelly, Land and People, p. 211; for a similar statement see Hancock, Two Reports, p. 36.
34 Jones, Life’s Work, p. 177.
36 Ibid., p. 596.
37 The landlord’s interest in tenant-right did not escape Montgomery, who wrote one of the first
scholarly historical accounts of Irish land tenure: “The landlord’s claim for arrears was a first charge
landlords could tolerate larger arrears, since they knew that they could recover any arrear up to the value of the tenant-right. Robert M'Crea, a Tyrone farmer, noted in his testimony to the Devon Commission that “defaulting tenants in general being permitted to sell, the arrears are always paid out of the purchase-money; and the tenant-right being sold and likely to sell so high, the tenants have been allowed to run into arrear.”

Because landlords knew they would get the arrears in the end, they were less anxious to evict tenants. And since tenants buying tenant-right knew they had nothing to gain by not paying their rent, landlords were less likely to get inept farmers or dishonest persons as tenants. We demonstrate both effects below.

In order for tenant-right to have been a profitable strategy for landlords, eviction must have been quite difficult. Indeed ejectment for nonpayment of rent was much more difficult in Ireland than in England. John Sproule, an apologist for Irish landlords, reported that in 1869 the average rent due when an ejectment decree was presented varied from 2.13 years in Leinster to a high of 2.38 years in Ulster. Jones noted that after waiting a year before beginning an ejectment, landlords could expect the process to take at least six months. Few if any tenants could have been ejected when less than 18 months in arrears. Charles Grey, experienced as a land agent in both Ireland and England, noted that ejectment took place much more quickly in England:

When a half-year’s rent is due here [England] for 30 days, more or less, as may be mentioned in the lease or yearly agreement, the landlord can re-enter, and if such re-entry is resisted, he can bring an action of ejectment, so that one year’s rent is hardly ever lost. In Ireland I hardly ever knew a tenant evicted without the landlord losing two year’s rent.

**WHY BONDS? WHY NOT SECURITY DEPOSITS?**

The posting of a bond is a potential solution to moral-hazard problems in many economic situations. Yet bond-posting is rare. Why? Moreover, the operation of tenant-right as described here seems to be unique to Ireland in the eighteenth and nineteenth centuries. What made Ireland’s circumstances so special? We identify three features of the Irish situation that are not often present, at least in combination, in principal-agent problems. First, the condition under which the bond is forfeited, nonpayment of rent is relatively easy to observe. By way of contrast, in the efficiency-wage model of Carl Shapiro and Joseph Stiglitz the moral hazard arises because it is difficult to detect whether a worker is performing

---

upon the sum obtained by the outgoing tenant, and the rent reserved, if lower than a competitive rent, yet possessed a greater degree of security.” Montgomery, *History*, p. 121.

38 Devon Commission, *Digest*, p. 307.


40 Quoted in Sproule, *Facts*, p. 26. As the publisher of this work suggests, it was sponsored by Irish landlords.
satisfactorily. The detection problem helps to make bonds impractical since it is difficult to verify the conditions for seizure of the bond. In the case of tenant-right the problem arises from limited contract enforceability, not imperfect information, so that in the presence of an ineffective legal system tenant-right served as an alternative enforcement mechanism. The operation of tenant-right requires a modern rental system with the legal limitation of the traditional powers of land owners but limited power to enforce rental agreements. Second, tenants cared relatively little about being evicted since they were not worried about their reputation. Many evicted tenants were heading for the United States or Canada, and others had little hope of continuing elsewhere as independent farmers. Thus repeated interactions and the formation of a reputation could not solve the enforcement problem. Third, the peculiar structure of the tenant-right bond also helped make it practical. Because the principal did not hold the bonds as cash, the need for complicated institutional arrangements such as escrow accounts was avoided. But only landlords' willingness to surrender some control over the identity of tenants allowed such an arrangement. Modern employers would be unwilling to let employees sell their jobs to the highest bidder to improve incentives. An Irish tenant farmer was merely expected to pay his rent. He was not one component of a complicated production structure in which it might be possible to create havoc through malice or ineptitude.

Modern residential tenants give their landlords a security deposit against nonpayment of rent. Why did tenant-right evolve rather than this more direct system? One reason may have been the proprietary instincts of the Irish peasantry, as described by historians, but another key issue is the size of the deposits. Modern rent deposits are generally on the order of two months of rent. A deposit would be similar in size to the value of tenant-right and thus, considering the figures given above, would be greater than three years of rent. This is too large a sum of money to be trusted in the hands of the landlord or agent who might abscond with many tenants' money. Irish landlords had the reputation of being heavily indebted because of excessively high living and conditions imposed by marriage settlements. Earlier historiography might have exaggerated this indebtedness, but even for the group of estates Vaughan studied, annual interest costs as a fraction of rent receipts ranged up to 39 percent. The average for these estates was 17 percent of rent receipts for those estates

41 Shapiro and Stiglitz, "Equilibrium Unemployment."
42 There is one fascinating case in which modern employers let employees sell their jobs to improve incentives. In New York City wholesale food delivery drivers often are not directly employed by the food producers but work quasi-independently. They are paid an efficiency wage for their deliveries and are allowed to buy and sell their delivery routes. Prices for routes are generally in the tens of thousands of dollars and may be higher (New York Times, 19 April 1993). This is a case in which incentives are important and employees work independently.
paying any interest.43 For some landlords at least the collective security deposits from entire estates might be a great temptation. The continuance of tenant-right as an institution implies that landlords who respected it were profiting at least as much as those who were not, so that raising rents and enforcing rent collection would not create more surplus. That is, the landlord could not steal the value of tenant-right because there was nothing for him to steal. Consider an alternative, a hypothetical Security Deposit Bank (SDB) that would create escrow accounts for agricultural security deposits. The SDB could not obviate the oft-cited problem of tenant-right’s expense as the security deposits would have to be of similar size. Unlike tenant-right the SDB could fail at any time.44 Tenants would have to attempt to monitor the condition and practices of an institution that would be complex and located far from home. Most importantly, to function effectively as a holder of escrow accounts the SDB would have to verify the claims of landlords and tenants. Each party has an incentive to lie about the other’s actions, and it is unclear why a large institution such as the SDB would have any special ability to determine the truth. Tenant-right differs starkly in this respect. Since the value of tenant-right depends on the landlord’s reputation as one who respects the institution, no outgoing tenant has any incentive to make false claims about his landlord’s behavior. Tenant-right does not solve the moral-hazard problem for the landlord, of course, but since the landlord’s time horizon is longer, his reputation is more important and his incentives to lie are much restricted.

A MODEL OF TENANT-RIGHT

This section sketches a formal version of the argument made earlier. We use the model to show that there was an equilibrium of the kind described, that this equilibrium would make tenant-right worthwhile for landlords, and to discuss some additional implications for the tenancy system. We assume that all land is of identical quality and comes in uniform parcels appropriate in size for one tenant farmer. Potential tenants differ in their farming ability \( \lambda \). This farming ability can be thought of as the ability to generate a surplus on the holding and willingness to surrender part of that surplus to the landlord as rent. Discussions of farming ability and willingness to pay rent permeate virtually all discussions of tenant-right.45

43 Vaughan, Landlords and Tenants in Mid-Victorian Ireland, pp. 130–31. Vaughan emphasizes that differences in bookkeeping practices make cross-estate comparisons hazardous.

44 One might think that existing joint-stock banks, of which there were several in Ireland by the 1850s, would be willing to perform such a service. But Irish joint-stock banks were loath to get involved in land transactions of any form.

45 \( \lambda \) generates a downward sloping demand curve for land. Although our basic argument does not require the complication of a range of farmer types (different \( \lambda \)), the extensions and further implications do. Simplifications such as the uniform quality and size of land parcels are convenient but do not affect our results.
The Ricardian rent on a unit of land will be defined here as the value of output minus the cost of capital and the opportunity cost of the tenant's labor. The opportunity cost of labor, which can be thought of as the wage for an agricultural laborer or the net return to emigration, is taken to be independent of $\lambda$. One might think that the opportunity cost of labor would be correlated with $\lambda$. All that is necessary for the following is that it not be perfectly correlated with $\lambda$. Thus the Ricardian rent, $Q(\lambda)$, on a unit of land is an increasing function of $\lambda$. The cash rent per period for a unit of land, $R$, is identical for all tenancies and constant over time. (The landlord cannot price discriminate.) Let $B$ be the market-determined value for tenant-right. Below we described how the market determines $B$. We assume, for the moment, that if a tenant is ejected for nonpayment he is unable to find another landlord willing to rent to him and so must work for the opportunity cost of labor. All incoming tenants have a working career of length $T$. Thus we define $V^P(\lambda)$ to be the present discounted value to potential tenant $j$, at time zero, of buying a tenancy and paying the rent for it.

$$V^P(\lambda_j) = \int_0^T (Q(\lambda_j) - R)e^{-it}dt - B + Be^{-iT} = \int_0^T (Q(\lambda_j) - R - iB)e^{-it}dt$$

(3)

where $i$ is the interest rate, which is assumed to be constant over time and equal to the discount rate of tenants. The first term represents the surplus accruing to the tenant from farming the tenancy. The second term is the cost of the tenancy, and the third term is the value of the sale of the tenancy upon retirement.\textsuperscript{46}

Similarly $V^N(\lambda_j)$ is defined to be the present discounted value to the tenant of buying a tenancy and \textit{not} paying the rent:

$$V^N(\lambda_j) = \int_0^\alpha Q(\lambda_j)e^{-it}dt - B + \max[0, B - \int_0^\alpha Re^{i(\alpha-t)}dt]e^{-i\alpha} - me^{-i\alpha}$$

(4)

where $\alpha$ represents the time required to evict a tenant and $m$ represents any costs incurred by the tenant as a result of eviction.\textsuperscript{47} This formulation is based on the assumption that arrears are charged the current interest rate.\textsuperscript{48} If $V^P(\lambda_j)$ is greater than $V^N(\lambda_j)$, and $V^P(\lambda_j)$ is greater than zero, then

\textsuperscript{46} We assume stationarity so that $B$ does not change over time. If $B$ were not constant then the third term would have to be modified to reflect the expected capital gain or loss from holding the tenancy. We discuss capital gains and losses associated with tenant-right later.

\textsuperscript{47} It would likely take some time to identify a failing tenant, especially since rent was only paid semi-annually. If this time is taken to be parametric it can be assumed to be part of the $\alpha$ periods to eviction.

\textsuperscript{48} To our knowledge tenants were not charged a literal interest rate on arrears, but it is fair to say the question has not come up in the historiography. There were costs of not paying rent on time that amounted to an implicit interest rate, however. (In fact if there were no such costs there would be no incentive to pay rent on time, although we know that most tenants did pay rent on time.) The actual
the tenant would like to buy a tenancy and pay the rent for it. Thus we examine $V^P - V^N$, the difference in values of paying and not paying the rent. There are two cases, corresponding to the situation where the tenant can and cannot gain by defaulting (they also correspond to the two possibilities in the max operator in equation 4). The following equation represents case 1, which is illustrated in Figure 1.

$$V^P(\lambda_j) - V^N(\lambda_j) = \int_0^T Qe^{-it}dt + Be^{-iT} + me^{-i\alpha} - \int_0^T Re^{-it}dt$$

$$\text{if } B - \int_0^t Re^{i(\alpha - t)}dt < 0$$

In case 1 the maximum arrears that can be accumulated prior to eviction exceeds the value of tenant-right: it may be possible to gain by defaulting. Below, we show that Case 1 will not occur in equilibrium; but it must be considered in order to determine the equilibrium. Now consider case 2, which is illustrated by the following equation and is diagramed in Figure 2.

$$V^P(\lambda_j) - V^N(\lambda_j) = \int_0^T Q(\lambda_j)e^{-it}dt + B(e^{-iT} - e^{-i\alpha}) + me^{-i\alpha} - \int_0^T Re^{-it}dt$$

$$\text{if } B - \int_0^t Re^{i(\alpha - t)}dt \geq 0$$

In case 2 anything that may be gained by nonpayment of rent is lost from the value of the tenant-right.

The expression above for $V^P - V^N$ may be less than zero. $V^P$ is greater than zero if and only if $Q(\lambda_j) - R - IB \geq 0$, that is, if farming the property produces an annual surplus above rent and capital payments. But in case 2, any gain from nonpayment of rent is made up by a loss from tenant-right over the first $\alpha$ periods, so that nonpayment is preferred to payment only if the return to both is negative. Thus if case 2 holds anyone willing to pay for the tenant-right will pay rent and there will be no evictions. In general, if arrears greater than the value of tenant-right may be accumulated (case 1) then there will be some range of $\alpha$s such that for farmers in that range the value of default is positive and greater than the value of payment. (See Figure 1.)

In a perfect-enforcement environment $\alpha$ would be equal to zero, default

costs for tardy payment varied from estate to estate. In some cases tenants were explicitly fined for not paying their rent on time (Thomas Dowling to Bessborough Commission, United Kingdom, "Report," part 3, Q2956). In other circumstances delinquent tenants faced the legal costs associated with contesting a notice to eject or a notice to distrain (Robert Cahill to the Devon Commission, United Kingdom, "Evidence," 877:1–91; John Lennon to Bessborough Commission, United Kingdom, "Report," Q7627–36). Further, a tenant with unpaid rent could be denied the franchise (Ibid., Q7638–41).
THE TENANT'S DECISION WHEN TENANT-RIGHT MAY NOT BE LARGE ENOUGH TO DETER DEFAULT

Notes: The figure diagrams case 1, which is expressed by the following equation:

\[ B < \int_0^\alpha R e^{-(a-0)} dt \]

In region 1 the farmer does not accept the tenancy, that is, \( V^P \) and \( V^N \) are less than zero (\( V^P, V^N < 0 \)). In region 2 the farmer accepts the tenancy but does not pay rent, that is, \( V^N \) is greater than \( V^P \), and \( V^N \) is greater than or equal to zero (\( V^N > V^P, V^N \geq 0 \)). In region 3, the farmer accepts the tenancy and pays rent, that is, \( V^P \) is greater than or equal to \( V^N \), and \( V^P \) is greater than or equal to zero (\( V^P \geq V^N, V^P \geq 0 \)).

Sources: See the text.

would be impossible, and tenant-right unnecessary. The equilibrium rent would be equal to the Ricardian rent generated by the marginal farmer, defined as the worst farmer who gains a tenancy. We will label the quality of the marginal farmer \( \lambda^* \), with Ricardian rent \( Q^* \). Now suppose that enforcement is not quite perfect, but that the custom of tenant-right is not observed, so that case 1 necessarily results, with \( B \) equal to zero. Note that for fixed \( m \) the limit of \( V^N(\lambda_i) \) as \( \alpha \) goes to zero is \(-m\). As the time to eviction becomes small there is no return to the farmer for the short time he remains on the land, but he still must pay the cost of relocation. This we interpret as the case in which enforcement of rental payment is good enough that tenant-right serves no purpose and rents will be exactly as if enforcement were perfect.

The simplest version of the model implies that there are no defaults or evictions in equilibrium. This is true despite the fact that we assume some
THE TENANT’S DECISION WHEN TENANT-RIGHT FULLY DETERS DEFAULT

Notes: The figure diagrams case 2, which is expressed by the following equation:

\[ B = \int_0^\alpha R e^{-\alpha - \delta t} dt \]

In region 1 the farmer does not accept the tenancy, that is, \( V^P \) and \( V^N \) are less than zero (\( V^p, V^N < 0 \)). In region 2 the farmer accepts the tenancy and pays rent, that is, \( V^p \) is greater than or equal to \( V^N \), and \( V^p \) is greater than or equal to zero (\( V^p \geq V^N, V^p \geq 0 \)).

Source: See the text.

potential farmers are either incompetent or unwilling to pay rent (they have low \( \lambda \)s). The result depends in part on land being competitively supplied. As noted above, this implication of the model is important because it explains (observed) low default rates. Below we discuss extensions to the model that do produce equilibrium default.

Why are there no defaults in the simple model? (From here, for simplicity, we assume that \( m \) is equal to zero for Ireland.) The following argument assumes that the landlord cannot capture the initial payment for tenant-right. If he can then the result follows immediately since tenant-right is costless to him. Suppose that a landlord charges rent, \( R' \), high enough to reduce tenant-right to a level at which default is optimal for some, but not all, tenants. In equilibrium, all landlords must make the same profit. It would be possible for a landlord with small holdings to increase his profits by charging a rent slightly below \( R' \). By decreasing his rent, this landlord would increase the competitively determined price of tenant-right on his estate. A farmer who would like to default under the \( R' \)
contract does not care that the rent would be lower under the new contract because he does not intend to pay rent in any case. But with the new contract the value of tenant-right is higher, and he has to post a larger "bond" so that his return to default is necessarily smaller. None of the "bad" farmers would accept the new contract. From the point of view of "good" tenants the new contract is no different from the old one since the cost of tenant-right would rise to make them indifferent between the two. Any landlord who slightly undercut the going rental will have a zero default rate. Landlord profits will rise: the loss of profits from reducing the rent marginally is first order, and the gain from having no bad tenants is a discontinuous jump. Therefore no equilibrium can exist in which some landlords have both paying and nonpaying tenants. Unsurprisingly, it is easy to show that the profits of a landlord with rents so high that everyone defaults must be lower than those of a landlord with high-value tenant-right and no default. The proof is left to the appendix.

With this equilibrium, the distribution of resources is identical to that with perfect enforcement: all farmers with \( \lambda \) greater than or equal to \( \lambda^* \) will get tenancies. Tenants gain nothing from the institution of tenant-right because they pay exactly as much in rent plus capital costs as they would have in simple rent with perfect enforcement.\(^{49}\) The above discussion shows that if it is difficult to evict quickly tenants who do not pay rent then even if landlords are not able to sell tenant-right to the first tenant (which would, in this static environment, make tenant-right equivalent to a security deposit from the point of view of the landlord) tenant-right will arise endogenously. Similarly, once the institution exists it is not in any single landlord’s interest to eliminate it though it is possible that all landlords might be better off if the practice could be banned entirely.

THE MODEL AND THE HISTORICAL DEBATE

This simple model explains why a landlord could find it in his interest to tolerate tenant-right. Now we will use the insights generated by the model to demonstrate that previous explanations of the operation of tenant-right are inconsistent with simple logic and then go on to show how the bond view of tenant-right explains further features of Irish land tenure. Later we consider two simple extensions to the basic model that relax strong assumptions in the original exposition and generate predictions more consistent with the historical evidence.

Distributional Implications of Tenant-Right

The view that tenant-right was a bribe to avoid tenant violence rests on a misunderstanding of the institution’s distributional implications. Con-

\(^{49}\) Tenant-right does have distributional implications if the tenant’s cost of capital (opportunity cost or the cost of borrowing funds) differs from the implicit interest rate on arrears. We discuss this issue below.
sider the famous statement by George Cornewall Lewis, an acute pre-Famine observer of rural Ireland:

The Whiteboys association [an agrarian secret society responsible for much violence against landlords and their agents] may be considered as a vast trade's union for the protection of the Irish peasantry: the object being, not to regulate the rate of wages, or the hours of work, but to keep the actual occupant in possession of his land, and in general to regulate the relation of landlord and tenant for the benefit of the latter.50

This view has more recent echoes in the historiography. For example, John Huttmann's assertion that the 1881 Land Act reduced the cost of land inputs for farmers amounts to saying that tenant-right had strong, profarmer distributional effects.51 Huttmann's view, like Lewis's statement, implies that tenant-right reduced tenants' cost of occupying land, just as a union raises workers' wages. This was not in general the case. The distributional consequences of tenant-right depended on the treatment of the initial payment for tenant-right. If the first tenant did not have to pay then he gained the total value of the rent reduction. Tenant-right had no effect whatsoever on the welfare of a new tenant, since the reduction in rent was completely offset by the payment for tenant-right. The only tenants who would have gained were those for whom tenant-right was newly introduced and who were not required to pay the purchase money directly to the landlord. For landlords the distributional implications were analogous. The original landlord lost the value of tenant-right if he could not charge the tenant for it. But any landlord who bought an estate that already had tenant-right paid a price for the estate that reflected the lower but more certain revenue associated with charging less than the full Ricardian rent. Tenant-right had distributional implications only if agricultural prices changed and rents did not change commensurately, an issue we consider later, or if landlords and tenants could not borrow at the same interest rate. Numerous observers commented that the purchase of tenant-right made extreme demands on a very rudimentary capital market. Dowling details the complicated ways in which tenant-right was both collateral and demand for loans.52 Often the large payments for tenant-right resulted in tenants so indebted to family, village usurers, or other farmers that they lacked the means to stock and run the farm. But the borrowing-costs problem implies that tenant-right was bad for tenants, contrary to assertions in the historical literature. If tenants organized to extort tenant-right from landlords then they were fighting for the right to pay high interest rates to usurers in exchange for some rent reduction.53

50 Lewis, *On Local Disturbances*, is quoted with approval in a recent influential history of modern Ireland (Foster, *Modern Ireland*, p. 294).
51 Huttmann, “Impact.”
53 Rural credit conditions in nineteenth-century Ireland have not been well studied. The evidence available suggests that poorer tenants and the landless relied on moneylenders charging high interest
Two final comments on tenant-right's distributional implications are in order. First, one can easily imagine that tenants valued features of the tenant-right other than the below-Ricardian rents. Many sources note that with tenant-right, farmers had the right of inheritance, a right otherwise not terribly meaningful for tenants. Liam Kennedy's discussion of tenant-right, like ours, views the sitting tenant as paying essentially two rents. But Kennedy also stresses some other features of the practice that tenants valued. But these rights have little to do with the price of tenant-right as we model it here. Imagine the following scenario: a landlord does not respect the heritability of tenant-right. So he forces his tenants to sell their holding to the highest bidder rather than turn it over to a son. What would prevent a farmer from simply being his own buyer and giving it to his son? The opportunity cost of the bequest to the father is the market price of tenant-right, regardless of whether the tenancy is actually sold. Second, our argument about distribution could be tested empirically, although not with readily available sources. If tenant-right has no distributional implications, and subject to the provisos about price changes discussed below, then for a given farm the opportunity cost of the capital invested in tenant-right plus the rent paid the landlord should equal the Ricardian rent. Several nineteenth-century parliamentary sources present tables of tenant-right prices and rents, but this information is not what we require. The Ricardian rent will vary among farms of the same size because of differences in location, soil quality, and so forth. Thus two farms of identical size could pay the same rent and sell for differing amounts without contradicting our view. A meaningful test requires using manuscript estate sources to develop proxies for the Ricardian rent, a task beyond the scope of this article but a possible subject for future research.

Landlords Who Refused to Respect Tenant-Right

Even in Ulster, where tenant-right was most prevalent, there were landlords who did not recognize tenant-right, and in much of the rest of Ireland tenant-right was less common. Vaughan argues that outside Ulster tenant-right differed in three ways. First, in the south the institution "was more a matter of landlord favor or acquiescence than of established custom." Second, outside Ulster tenant-right did not have "the certainty of a fixed price." Third, "many of the sales in the south were, if not secret, at least clandestine, and landlords did not co-operate in carrying them out."

rates and using interlinkages such as are common in developing countries today. Tenant-right was mortgaged even prior to the 1870 Land Act, and one result of that act was an extension in the amount of credit raised on the strength of tenant-right (Vaughan, Landlords and Tenants in Mid-Victorian Ireland, pp. 90, 98).

54 Kennedy, "Rural Economy," pp. 39–40. Kennedy effectively makes the larger point that tenant-right has been assigned too large a role in the development of Ulster's economy.
The second two differences are in essence consequences of the first: outside Ulster many landlords refused to sanction tenant-right.\textsuperscript{55} Our model implies that tenant-right had many desirable properties for the landlord. So why was it not used everywhere? The common practice of paying land agents on commission—as a percentage of rent collected—encouraged land agents to favor tenant-right. Land agents bore the full costs of rent-collection, but only their share of the marginal rent collected. Landlords had a more complicated choice. The alternative to tenant-right was to use seizure of crops and other tenant property, or eviction and threats of eviction, to get the rent collected. The historiography provides only hints as to why a landlord might choose “enforcement” over tenant-right. Landlords with no distaste for conflict and litigation would be less willing to sacrifice the rent necessary to support tenant-right. For example, in his autobiography landlord Jones—a fierce opponent of tenant-right—conveys the impression of one who positively relished conflict with his tenants. Other landlords, particularly those with political ambitions, may have cared more about their public image and have viewed tenant-right as money well spent.\textsuperscript{56}

Our model helps to explain some features of tenant-right as it existed outside of Ulster. Landlords who did not recognize tenant-right often discouraged any payments to the outgoing tenant.\textsuperscript{57} Their concern over secret payments seems puzzling but is easy to understand in light of the model above. The willingness of incoming tenants to pay tenant-right to outgoing tenants suggests that these landlords were not charging full Ricardian rents. By failing to honor the entire tenant-right mechanism,

\textsuperscript{55} Vaughan, \textit{Landlords and Tenants in Mid-Victorian Ireland}, pp. 77–79. In some cases landlords might have refused to sanction the practice but had estate agents who tolerated tenant-right anyway. This appears to have been the case with Lord Portarlington, a substantial proprietor who claimed in the 1860s that there was no tenant-right on his property. His agent is alleged to have replied: “There is whether you have heard of it or not. Undoubtedly it has been going on, and it is very greatly for your advantage.” United Kingdom, “Report,” Q. 3796.

\textsuperscript{56} Maguire, \textit{Downshire Estates}, pp. 66–67, claims that commissions of 5 percent were the most common arrangement between a landlord and land agent before the Famine. Donnelly, \textit{Land}, pp. 184–85, discusses land agents who charged only 2.5 percent commission in the 1860s, a rate so low that these agents could have been nothing more than rent-collectors and presumably quite sympathetic to the incentive effects of tenant-right.

The interaction between a tenant-right contract and a competing contract in which rent collection is enforced is somewhat complicated, and theory does not produce strong conclusions. One can show that there may be equilibria with all landlords recognizing tenant-right, no landlords recognizing tenant-right, or either stable or unstable mixed equilibria (some landlords with tenant-right, others without) depending on the details of the enforcement technology. These results are for identical landlords with the equilibrium condition that profits be equal across contracts for any equilibrium in which both contracts are offered. Differences in enforcement costs across landlords would naturally generate the mixed equilibrium. In the absence of strong prior evidence on the nature of the enforcement technology no concrete predictions can be made.

\textsuperscript{57} Several informants from areas where tenant-right was not respected complained that incoming tenants made clandestine payments to the outgoing tenant (for example, R. F. Saunders of County Wicklow (Devon Commission, \textit{Digest}, p. 315). The Devon Commission concluded that many landlords attempted to restrict the practice, but that “such restrictions are frequently evaded” (Ibid., p. 290).
these landlords did not enjoy the incentive and selection benefits of tenant-right. Landlord opposition to surreptitious payments can be understood by considering the interaction with a competing tenant-right contract. Since default could not have benefited a tenant with tenant-right, only the better tenants would have accepted such a contract. If these "good" tenants were indifferent between the tenant-right contract and a contract for which rent collection was enforced, then the distribution of tenants facing the enforcing landlord would have been worse than the population distribution since some of the better types were being skimmed off the top. However, if a landlord charged a slightly lower rent while enforcing rent collection and did not allow outgoing tenants to receive payments then all tenants would have preferred this contract, and a smaller proportion of tenants would have tried to default, increasing the profits of this landlord. Landlords who wanted to enforce rent collection would have wanted their contract to be strictly preferred by all tenants; that is, they had to forbid surreptitious tenant-right payments so that the value of the rent discount was passed on to new tenants.\textsuperscript{58} Thus the enforcing landlord had a strong interest in preventing any such payments from being made. Surreptitious payments reflect rent he gave up but prevented him from getting any advantage in return.

\textit{Tenant-Right and Ejection}

Our simple model implies that in equilibrium there are no evictions if land is competitively supplied. Ejectment in Ireland was very rare in the period from 1849 to 1869, as we have seen. The low rate of ejectment in post-Famine Ireland has suggested to some Irish historians that ejectment was \textit{too} rare. For example, in discussing the proposed 1870 Land Act, Donnelly asserts that "the rate of ejectment was already low (too low for reasonable agricultural efficiency)."\textsuperscript{59} Our model implies something quite different. If some potential tenants do not know how good farmers they will make and are over-optimistic as to the returns to their farming, they might accept tenancies that are unprofitable. In the absence of tenant-right such tenants would have to be evicted in the interests of efficiency. But with tenant-right, poor tenants have nothing to gain from failing to pay the rent and have no profit in continuing to farm. Even bad farmers would leave peaceably. Thus with tenant-right a very low eviction rate may well be compatible with efficient distribution of resources.

The ejectment rate in Ireland was low, but ejectment was not nonexistent as implied by the basic model. We extend the basic model to consider two further important features of Irish tenancy. Both extensions produce equilibrium default: monopoly power on the part of landowners and uncertainty in agricultural production.

\textsuperscript{58} This is analogous to the Shapiro-Stiglitz efficiency wage model in which if employees could sell their jobs to new workers the incentive scheme would collapse.

\textsuperscript{59} Donnelly, \textit{Land}, p. 204.
A good deal of the agricultural land in Ireland was held in the form of very large estates. If landlords had imperfect knowledge of the histories of potential tenants from outside the area so that reputations had only local value, then large landlords had some local monopoly power. With tenant-right, a landlord with monopoly power would have wanted to raise rents and tolerate some positive eviction rate. (This argument assumes that tenant-right already existed so that the landlord could not have sold to the first tenant. If he could have sold tenant-right to the first tenants, he would have wanted to guarantee no default since he lost nothing from tenant-right.) Starting from the no-default level of tenant-right, a small increase in the rent caused a small range of tenants to default, but the loss to the landlord from each of these tenants was marginal because tenant-right covered almost, but not quite, the maximum value of arrears. The total loss from these tenants was second order while the gain from the increase in rent payments by the “good” tenants was first order. Any element of monopoly power on landlord’s part, that is, produced some defaults even with tenant-right.60

UNCERTAINTY

Eviction, as we saw, was very uncommon relative to the amount of trouble it caused in the popular imagination. Our model suggests an explanation of this finding that couples uncertainty in agricultural output with the operation of tenant-right. If farmer-specific productivity shocks were not perfectly observable then the landlord (or his agent) could not have easily distinguished between those tenants who did not pay rent because they had a bad year and could not get a loan to cover it and those tenants who did not pay rent because they never had any intention of paying it. But in a competitive market there would still be no tenants who intend to default. (As in the certainty case, it is always possible for some landlord to reduce his rent slightly and make his contract unattractive to tenants who would default under the old contract.)

This analysis implies that many tenants who were ejected did not default intentionally: they simply received a series of bad weather shocks or had other problems beyond their control. With tenant-right, no sequence of shocks would have affected the decision of a “good” tenant to pay the rent. But provided that the unobservable variance in production is sufficiently large, there is some probability of tenants being in arrears for $\alpha$ periods—and so being ejected. Tenants who had unverifiable streaks of bad luck would have been evicted but no one else. No one who was evicted “deserved” to be. The landlord would have been better off retaining such

---

60 This statement is precise for infinitely lived farmers. For finitely lived farmers there is the added complication that eviction means that there is greater effective supply relative to demand, but it can be shown that the same result holds.
a tenant if there were any costs to eviction, but if an individual landlord adopted a policy of forgiveness knowing that the defaults were not the tenants' responsibility, then all of the current tenants who were not good enough to generate much surplus from farming would have found it to their advantage not to pay their rent, knowing that there was some chance the landlord would forgive arrears. Moreover, such a landlord would have found that all of his new tenants were not interested in paying the rent since this contract would have been the only one that would have yielded positive surplus to some range of tenants who could not generate surplus while paying rent. The landlord had no choice but to evict some tenants who were known to be innocent.61

**STICKY RENTS, PRICE CHANGES, AND THE DEMISE OF TENANT-RIGHT**

The model implies that tenant-right, quoted in years purchase, should approximately equal the number of years necessary to eject a bad tenant. Prices quoted for tenant-right before the Famine varied widely, but the three to four years purchase cited by many informants would square well with the two-and-a-half years to eviction cited earlier.62 Thus our security-deposit model provides a good explanation for the size of tenant-right values at the time of the Devon Commission. By the late 1860s and early 1870s, however, sober observers were claiming that tenant-right had reached ten and even fifteen years purchase. At these values, landlords were forgoing much more of the Ricardian rent than was necessary for the incentive and selection effects of our model. What happened?

The proximate cause of the run-up in tenant-right prices is simple: the period from the mid-1850s to the late 1870s saw strongly rising agricultural prices, and Irish landlords did not increase rents enough to keep tenant-right at a constant value. The Bessborough Commission noted in the 1880s that much land had not seen rent increases since the 1850s. The lack of rent increases forms a cornerstone of the new thinking on Irish landlords. Vaughan estimates that the value of agricultural output in Ireland increased by about two-thirds from 1850 to the mid-1870s. Over the same period he estimates that rent increased by only about 20 percent. These estimates imply that tenant incomes, or the value of output minus the opportunity cost of labor, rent, and some smaller costs, trebled by the mid

---

61 Formally, this result requires that prospective tenants believe that the landlord's actions this period will be the same as his actions next period. The resulting equilibrium rent will be lower than the rent, $R^*$, that is charged under certainty. Because some high quality tenants are evicted every year, the average length of land tenure is decreased. This increases the annual supply of tenancies and reduces the equilibrium rent as the marginal farmer will have a quality less than $\lambda^*$.  
62 The average time to eviction is less important than a figure nearer the maximum time to eviction. Landlords want tenant-right to be valuable enough to deter even the most stubborn potential tenants. The argument for this is the same as the argument that there is no eviction in the basic model despite a variety of types of farmers. The previously cited figures on time to eviction, from Sproule, *Facts*, refer to a later period—1870. We have not been able to locate comparable information for the earlier period.
136  Guinnane and Miller

1870. As a student of the political struggles over land in the 1870s and 1880s concludes,

The truly outstanding feature of Irish rents was that landlords did not routinely increase them in response to increases in the value of land or agricultural prices. Instead they preferred, if the holding were occupied by a “good” tenant, to leave the rent unchanged over a long period of time. It is possible to find numerous examples of estates where rents were not raised significantly for ten, twenty, or even thirty years at a stretch.

We can better appreciate the stability of Irish rents by comparing their actual levels to some rents computed under hypothetical alternative schemes. Figure 3 displays some counterfactual rent estimates due to Vaughan. The two hypothetical rent series are based on agricultural prices. Most intriguing is the Trinity College, Dublin, or TCD series. This rent-fixing system, which applied to the tenants of Trinity College, Dublin, was based on a weighted basket of the prices of five agricultural commodities. The system was written into statute after negotiation between

---

Notes: Figures are in millions of pounds sterling. Calculations treat Ireland as one large farm. Actual rents are Vaughan’s estimates of aggregate rents charged. Profit rents are a hypothetical system that would divide output minus the opportunity cost of labor minus other minor charges between landlords and tenants, with 45 percent going to landlords each year. TCD rents are based on a system legislated for tenants of Trinity College, Dublin.

Source: Vaughan, Landlords and Tenants in Mid-Victorian Ireland, appendix 13.

---

63 Vaughan, Landlords and Tenants in Mid-Victorian Ireland, appendix 9. There is some disagreement about post-Famine output figures, a disagreement with implications for how much potential rent landlords did not collect. Vaughan’s numbers for the value of agricultural output have recently been brought into question by Michael Turner. In as-yet unpublished work Turner suggests that Vaughan’s results are sensitive to the choice of base years and price deflators. Nonetheless, the prices reported by Barrington, “Review” and the very fact that tenant-right values rose by such an amount support at least the broad outlines of Vaughan’s story.

64 Clark, Social Origins, pp. 167–68.
representatives of the tenants and Trinity College. Vaughan’s series plotted in Figure 3 assumes that the TCD system was applied to all of Ireland. As Vaughan notes, any actual system of rent-fixing had to be based on a similar scheme.65

Few, if any, practical rent-setting schemes would entail annual fluctuations in rent payments. But actual Irish rents in the period from 1850 to 1886 were especially insensitive to changes in prices, as shown in Figure 3. Either of Vaughan’s two counterfactual rents tell the same story: Irish landlords could have earned a great deal more from their estates if they had adjusted rents in line with agricultural prices. Why were rents so sticky? Tenant-right cannot be the entire answer, but on estates with widespread tenant-right increasing rents would have been especially difficult. There are two subproblems. First, disagreement between landlord and tenant over the rent adjustment appropriate for maintaining the value of tenant-right may have convinced tenants and others to think the landlord was reneging on the entire tenant-right arrangement. Second, a landlord would not have wanted to incur the cost of raising rents in the face of transitory increases in agricultural prices. Where is the permanent price increase in Figure 3?

Consider a tenant who purchased tenant-right in 1850. The TCD rent series implies that by 1855 the value of his holding had increased considerably. Suppose that his landlord raised the rent on that holding to the TCD series level in 1855. The landlord could have stated, accurately, that this rent increase was not stealing the tenant’s property; rather, the rent increase was only restoring tenant-right to its 1850 value. But the tenant might well have objected that had he known the landlord would confiscate the whole capital gain, he would have sold the tenant-right in 1854, or would have not invested in tenant-right in the first place. This is complicated enough. Now consider a second tenant who purchased tenant-right in 1854. If the landlord in 1855 raised rents to their TCD level, this second tenant would have suffered an actual capital loss. Without negotiating separate rents for every tenant it would have been extremely difficult to satisfy everyone. Contemporaries were aware of this feature of tenant-right. In his Devon Commission testimony John Hancock discussed the issue of how a landlord could raise the rent on an incoming tenant without depriving the outgoing tenant of his tenant-right.66

In practice tenant-right had the effect of placing much of the risk of variation in prices or soil productivity on the shoulders of the tenant, the party who was poorer and thus less able to bear risk.67 One feature of this peculiar risk-shifting accounts for much contemporary discussion of the custom and tenant-right’s ultimate demise: tenants faced substantial

65 Vaughan, Landlords and Tenants in Mid-Victorian Ireland, appendix 11.
66 Devon Commission, Digest, pp. 297–98.
67 Mokyr’s discussion of tenant-right and uncertainty in “Uncertainty” anticipates our argument here.
capital losses. Figure 3 shows that agricultural prices collapsed in the late 1870s and 1880s while rents declined only slightly. Farmers who had purchased tenant-right when prices were low simply lost their unrealized capital gains. Tenants who had borrowed to pay the high tenant-right prices of the 1860s and 1870s, however, were forced into poverty by the very institution that had been held to protect the farmer, as was sardonically pointed out by a tenant-right critic:

It will be seen then that Tenant-right is no security even against starvation. Tenant-right is as strong in Donegal as in any other part of Ulster; yet, as Mr. Tuke tells us, whole parishes were starving last winter, though every man had this valuable Tenant-right, as it is supposed to be, which he could have sold not long before for ten to twenty years' purchase.68

Regulation of rent under the 1881 Act marked the demise of tenant-right as we have modeled it here.69 The political agitation for the regulation of rents that culminated in the Land Act of 1881 was complicated and concerned several issues besides land. But at the heart of its land-based component lay a simple problem: tenants owning tenant-right had not objected to price increases unmatched by rent increases in the 1850s, 1860s, and 1870s but called on Parliament to act when the tables were turned. As Solow so aptly noted, "the Land Act of 1881 was really less a considered policy than a wholesale income-maintenance program, a relief program, at the expense not of the government but of the landlords."70

The pattern of a huge and long-lasting increase in agricultural prices followed by their collapse was different from earlier patterns of price fluctuations and led to the demise of tenant-right. Contrasting the period of the Napoleonic Wars to the period from 1850 to 1873 underscores the contrast between temporary and permanent price changes. Irish agricultural prices increased greatly during the Napoleonic Wars, but these prices were highly volatile, changing as wartime conditions changed. The post-Famine price increases, on the other hand, had their ups and downs, but with the exception of the early 1860s the trend was strongly increasing. The former episode was much less likely to be interpreted as permanent price change than the latter.71 Without experience in dealing with fluctuations of this magnitude the basic inflexibility of the system led landlords and tenants to a difficult impasse in the 1870s. Had such fluctuations been a

69 Under the 1881 Act special courts had the power to set rents for judicial terms of 15 years. Hooker, *Readjustments*, notes that the rent decreases pushed through were substantial, but we do not know of any source that compares these rental reductions to the price-driven rent declines that would have occurred in an unregulated market. See Guinnane and Miller, "Limits," for further description of land legislation and its effects.
71 Solar, "Growth," appendix tables 2.1 through 2.17, presents agricultural price indices for Ireland from the late eighteenth century through the early post-Famine period. Turner, "Towards an Agricultural Prices Index," appendix 2, presents similar information for the post-Famine decades.
regular phenomenon perhaps the runup and subsequent collapse of tenant-right prices might not have occurred.

**IMPLICATIONS AND CONCLUSIONS**

This article proposes a new explanation for perhaps the most puzzling aspect of the long debate over land tenure in nineteenth-century Ireland: the fact that many landlords tolerated an institution that historians and many contemporaries alike insisted was a violation of landlords' property rights. Our explanation suggests that tenant-right could be part of a rational strategy of estate management. Tenant-right, we have shown, made it easier for Irish landlords to collect their rents. The mechanism worked in two related ways. A sitting tenant knew he had nothing to gain by not paying his rent, and a potential incoming tenant would not pay for tenant-right if he did not intend to pay rent. By keeping their rents below competitive levels, landlords respecting tenant-right traded potential rental income for the greater ease and certainty of receiving that income. Implications of our model cast new light on two features of Irish land tenure in addition to the tolerance of tenant-right. First, ejectment was much rarer than one would think, given its prominent role in political agitation and literary accounts. Our model suggests a reason for this: few people were ejected, but those who were ejected were unlikely to be at fault. Second, landlords who did not respect tenant-right on their own estates had good reason to object to the often-noted surreptitious payments to outgoing tenants.

Scholars have long noted that tenant-right was widespread. Some have argued that tenant-right worked off fears of agrarian violence, but this view, as we have noted, presupposes that tenant-right shifted wealth from landlords to tenants, which is not true. Others have argued that tenant-right reflects Irish peasants' and farmers' notions of property rights, a refusal to regard Ricardian rents as fair or just. The second view may accurately characterize tenant feeling, but cannot explain why landlords deferred to such feelings. Our explanation squares better with the fact that many of the best landlords in Ireland respected the system with few apparent reservations. The system of tenant-right broke down when large price changes first ran up its value and then ruined those who had invested in tenant-right. But in the absence of such changes, it had made the rent easier to collect.

**Appendix: Proof That No Default is the Unique Equilibrium**

In equilibrium, on any particular farm either all of the tenants default or all of them pay the rent. If some landlords are charging rents so high that everyone defaults then they may
be charging different rents but this does not matter since no one pays the rent. There must exist some level of Ricardian rent, $Q'$, such that all of the potential tenants who choose the low rent contract have $Q \geq Q'$ while all of the potential tenants with $Q$ in the range $[Q, Q']$, for some $Q$, will prefer the high rent contract. This can be seen by noting that the derivative of $V^N$ with respect to $Q$ is greater than that of $V^P$ and that these derivatives are independent of the rent and the value of tenant-right. The price of tenant-right for the contract with default will be set by supply and demand: the marginal farmer, with $Q$, will gain zero surplus. If $B^N$ is the price of tenant-right for this contract then

$$B^N = Q \int_0^a e^{-\mu t} dt$$

The landlord receives all of the value of tenant-right with a delay of $\alpha$ periods, so that the landlord’s per period, per-tenant return is simply $\bar{Q} e^{-\alpha}$. For a landlord offering the contract on which there is no default we must determine the rent being charged, $R^N$. Since the rent must be high enough to deter default by the worst of the tenants we know that:

$$B^N = \int_0^a R^N e^{(\alpha - t)} dt$$

and since the marginal farmer receives no surplus (once again, supply equals demand) $B^N = (Q' - R^N) / I$. Combining this expression with equation 6 yields $R^N = \bar{Q} e^{-\alpha}$. Since $\bar{Q} < Q'$ the return to the landlords with no default is higher and thus this cannot be an equilibrium. Exactly the same logic shows that there is an equilibrium when all landlords charge rent low enough to deter all default. Starting from a situation in which all landlords charge the same rent and no one defaults, if a landlord raises his rent then everyone who accepts his contract will want to default: “good” tenants from the standard contract would only be willing to pay enough for tenant-right to make them neutral between the two contracts. But at this price we know that some “bad” tenants would gain positive surplus by defaulting. They would be willing to outbid the “good” tenants and so would guarantee that everyone taking the contract would default. The proof above now tells us that the profits of the deviating landlord are less than they would have been under the standard contract. Thus in equilibrium there is no default.\footnote{Technically this proof would allow some landlords to charge higher rents and have only defaulting tenants if it is assumed that there is a continuum of infinitesimal landlords. But in this case the landlords charging higher rents could only have land with measure zero. If there were any cost at all of evicting tenants then all landlords would charge the same rent and there would be no default.}

REFERENCES


Tenant-Right in Nineteenth-Century Ireland


Fitzgibbon, Gerald. The Land Difficulty of Ireland. London: Longman, Green, Reader, and Dyer, 1869.


Russell, Robert. Ulster Tenant Right for Ireland: or, Notes upon Notes Taken During a Visit to Ireland in 1868. 2nd ed. London, 1870.


United Kingdom. House of Commons. “Return Showing the Number of Agricultural Holdings in Ireland, and the Tenure by which They Are Held by the Occupiers.” *Sessional Papers, 1870*, Vol. 56.

United Kingdom. House of Commons. “Summary of the Returns of Owners of Land in Ireland, Showing, with Respect to Each County, the Number of Owners Below an Acre, and in Classes up to 100,000 Acres and Upwards, with the Aggregate Acreage and Valuation of Each Class.” *Sessional Papers, 1876*, Vol. 80.

