

POLICY PAPER

Learning from Agricultural Land Market Regulation Policies in EU Member States

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Abstract: This article draws from economic theory and the recent European Commission report on agricultural land market regulation to assess the suitability of selected regulatory policies for agricultural land markets in Ireland. Insights from policy in other EU Member States indicates that some flexibility is always required to permit the existence of temporary land leasing contracts. Farmland rental prices in Ireland have mainly followed the underlying returns to agriculture and been much less influenced by speculative bubbles relative to farmland sales markets. The land rental data for 2019 do not point to the need for maximum price regulation. The availability of reliable statistics is not a sufficient condition to prevent bubbles from emerging, but farmland markets need to be closely monitored with up-to-date official statistics informing potential market participants and public policy.

Acknowledgements: The authors are grateful for funding provided by DAFM under the RENEW2050 project. The authors are grateful to the ESR editorial team and the anonymous referee who provided valuable feedback in emphasising the question of market failure. We acknowledge the input of Brian Moran, John Lennon and the Teagasc National Farm Survey recorders in collecting and validating the Teagasc National Farm Survey data and are grateful to the farmers for participating in the Teagasc National Farm Survey. We are grateful to the Property Services Regulatory Authority of Ireland (PSRA) for access to the agricultural land lease data from the commercial leases register.

We are thankful to Philippe Burny (University of Liege), Luca Salvatici (Roma Tre University) and Andrea Povellato (CREA) for their feedback and for feedback from other participants at the 12th AIEAA conference in the University of Milan in 2023. The authors are solely responsible for the content and the views expressed.

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I INTRODUCTION

In the economics discipline, questions in relation to land market regulation are usually considered with reference to the presence or otherwise of market failures. Moreau (2004) describes well-known types of market failure including the existence of a natural monopoly, the existence of public goods, the potential for externalities, incomplete markets and imperfect information. In the context of farmland markets, a number of undesirable outcomes can emerge from market failures including excessive speculation, the accumulation of land ownership, market power and the inequitable distribution of rents among farmers and landowners (Odening and Hüttel, 2021). Negative environmental externalities are an important consideration. In the presence of such externalities, the optimal land market outcomes will diverge from market-determined outcomes (MacMillan, 2000). In this article, we explore the need for farmland regulation in Ireland with reference to market failure and the experience of other EU Member States in farmland market regulation.

The concept of market failure is closely associated with the concept of pareto efficiency or optimality. Pareto efficiency is defined as a situation where it is impossible to change the distribution of resources between individuals while ensuring a gain in utility for some participants and ensuring no declines in utility for any participants (Wicksell, 1934; Stiglitz, 1981). A strict adherence to the related concept of pareto superiority essentially limits the case for government regulations in farmland markets but does not preclude policymakers from making a positive difference to societal outcomes. For instance, policies focused on improving market information for participants in farmland markets can be pareto improving.¹

Apart from the choice of relevant policy criterion, the consideration of land market regulation needs to take into account that the first-best scenario may not be realistic in rural land markets given the likelihood of incomplete information and other sources of market imperfections (Holden, 2022, pp. 117). Agricultural land markets are influenced by expectations about the future, and relative optimism/pessimism influences decision-making (Brown and Brown, 1984; Seifert and Hüttel, 2023), price dynamics (Hüttel *et al.*, 2016; Deaton and Lawley, 2022) and the development of bubbles (Baker *et al.*, 2014; Lence, 2014). In transaction cost theory, the importance of opportunistic behaviour and bounded rationality in influencing decision-making are to the fore, and the potential for opportunistic behaviour in farmland markets is considered in the literature (Hurrelmann, 2002; Calus *et al.*, 2008).

In the presence of market failures, it is not simply a question of whether or not the buyer and seller (landowner and tenant in the case of rental contracts) have

¹ An alternative to the pareto efficiency criterion is the Kaldor-Hicks criterion, which provides greater scope for policy involvement (Mukoyama, 2023) but receives criticism for its treatment of distributional effects (Persky, 2001).

entered into a contract voluntarily at a given price for an individual plot of farmland. This is arguably of particular importance in the case of land rental markets where a continued relationship between the landowner and tenant is expected over the course of the lifetime of the contract. Long-term land rental contracts can increase the risk of ex-post maladaptation, and this raises the importance of including contract provisions such as break clauses and notice periods, which can enable adaptation over the course of long-term exchange (Onofri *et al.*, 2023). The presence of transaction costs primarily raises the importance of good governance in land markets, but is also relevant for regulation given that enforcement is not costless (Hurrelmann, 2002).

Economic theory provides guidance on questions of land market regulation. At the same time, we can observe significant differences in the extent and type of regulation in agricultural land markets between different countries. Agricultural land market policies vary significantly between EU Member States. There is no specific EU legislation regulating land market transactions and land market policies are largely developed at the national level. A detailed study about the theoretical justification for the choice of regulations in each EU Member State lies outside the scope of this research. However, the paper explores the case for and against a selection of alternative policies for the agricultural land market in Ireland. These alternative policies are based on a subset of those existing in other EU Member States.

The agricultural land markets in Ireland are considered to be among the least regulated in the EU both in terms of the protection of tenants and the protection of landowners (Swinnen *et al.*, 2016). The acquisition of farmland falls within the area of EU law related to the free movement principles governing the functioning of the EU internal market, thereby restricting the extent of Member State regulation (Stankovics *et al.*, 2020). However, the EU treaties recognise the distinctive nature of agricultural land (European Commission, 2017). Restrictions on foreign investments in farmland are permitted if these are proportionate to the protection of ‘legitimate public interests’, including ‘preserving agricultural communities, developing and maintaining sustainable agriculture, or preventing land speculation’ (Vranken *et al.*, 2021).

The land sales market in Ireland is relatively thin (Loughrey *et al.*, 2020). Data from the National Statistics agency indicate that approximately 0.5 per cent of agricultural land is sold each year (CSO, 2024). This low rate of land sales activity can be traced to the sentimental ties of farmers in Ireland towards land ownership (Bradfield *et al.*, 2023). There are few land market regulations governing the land sales market in Ireland and this is common to many other Western European countries (Vranken *et al.*, 2021). France is an exception with the SAFER (Société d’Aménagement Foncier et d’Etablissement Rural) playing a role in price monitoring and potentially exercising a priority right to acquire a property that is offered for sale while another institution known as the CDOA (Commission

Départementale d'Orientation Agricole) can exercise an important role in the selection of buyers (Piet *et al.*, 2021). In Germany, sales transactions of agricultural land are subject to some regulations (Lehn and Bahrs, 2018). In Italy, there are sales regulations related to the pre-emptive rights of tenants and neighbouring farmers (Galletto, 2023).

Land sales prices continue to increase in many parts of Europe (Curtiss *et al.*, 2021; Plogmann *et al.*, 2022). In Ireland and elsewhere, land rental transactions are increasingly considered as an alternative for farmers who wish to expand their land area. Ireland is similar to Denmark in terms of a relatively low share of land rented. The rental share appears to be rising in Denmark during the last decade (Otte Hansen, 2021). This dominance of land ownership can be traced to the late 19th century and early 20th century when governments in both countries followed the dominant strategy of supporting tenants to become owner-occupiers (Swinnen, 2002; Swinnen *et al.*, 2016).

A significant increase in agricultural land leasing activity is occurring in Ireland (Geoghegan *et al.*, 2021). National policies appear to be playing an important role with the expansion of tax incentives motivating landowners into supplying more land to potential tenants (Geoghegan *et al.*, 2017). There is official evidence of an increase in the uptake of tax incentives for the leasing of agricultural land (Revenue, 2024). The expansion of the dairy sector is also considered to be a strong influence on the increasing rental activity (Bradfield *et al.*, 2020). Results from the 2020 Census of Agriculture indicate steady increases in rental activity in Ireland. These results indicate that Portugal is the EU Member State with the lowest rental share and Ireland is the EU Member State with the second lowest rental share despite recent growth in medium and long-term leasing activity (Eurostat, 2024a).²

In Ireland, there are no regulations in relation to the minimum duration of land rental agreements as is the case in other Western European countries such as Belgium and France. In Ireland, the conacre arrangement has traditionally dominated land rental transactions and involves the short-term letting of land parcels for a typically 11 or 12 month period. Many studies highlight the history of conacre arrangements including the widespread sub-letting of conacre parcels in early 19th century Ireland (Patriquin, 2006). This practice declined during the late 19th century in the aftermath of the potato famine (Alexander, 1963) and with the consolidation of land holdings (Braa, 1997). However, the short-term rental agreements continued throughout the late 19th century and into the 20th century as a result of the Land Commission regulations (Conway, 1986). Based on a survey of land tenure in Ireland in 1977, it was found that 94 per cent of rented land was let for 12 months or less (Kelly, 1979, as cited in Murphy and Nunan, 1993).

² Eurostat is responsible for issuing the legislation establishing the framework for the EU's Agricultural Census. This legislation is given in the following: <https://eur-lex.europa.eu/eli/reg/2018/1091/oj>.

Until recently, the vast majority of agricultural land rental agreements in Ireland remained short-term in design (O'Neill and Hanrahan, 2012). There may be some lessons from policies in other EU Member States in relation to the legal duration of land rental agreements. The popularity of formal long-term land leasing contracts is more established in other Western European countries including France and Belgium where long-term land leases are the dominant form of land tenure (Adenuga *et al.*, 2021).

In addressing the topic of land market regulation in European countries, it is important to attempt to understand the motivation for the emergence of regulatory policies. Boinon (2003) explains that land market regulation in France has not simply been concerned with distributional outcomes but has also focused on ensuring the development of farms with a sufficient size to implement technological progress.³ Boinon concludes that land market regulation (including price regulation) appears as a tool to support the allocation of land to the relatively more productive farmers: the logic being that a greater share of the economic surplus accrues to the tenant farmer relative to the non-farming landowner and that this surplus can be re-invested to attain further productivity growth. In some ways, this is akin to the logic of the market, where the highest bidder gains access to the land and makes best use of it. Courleux (2011) concludes that the status of the tenant farmer in France is near equivalent to that of direct ownership and that land policies have the objective of ensuring the stability necessary for investment decision-making. In the land market, the interventions of the SAFER organisation favour medium-sized farms over the largest farms, and this influences the overall farm structures (Piet *et al.*, 2012).

The expansion of tax incentives for land leasing can be traced to policy efforts related to the dairy sector (Bradfield *et al.*, 2020) and has supported the increasing tendency towards formal land leasing contracts in Ireland. This contrasts with the Netherlands where short-term leases are increasingly adopted (Vranken *et al.*, 2021). In the Netherlands, the regular lease has a minimum duration of 12 years and various other short-term contracts are permitted (Slangen and Polman, 2008). The growth of shorter-term contracts appears to be a response from Dutch landowners in demanding more flexibility and followed a significant decline in the land rental share from about 1970 onwards (Swinnen *et al.*, 2016). A decrease in contract duration is also reported in Italy with deregulation in the land markets (Sckokai, 2021). Italy and the Netherlands appear to be examples where there is a trend towards deregulation of the land market. EU Member States are regularly revising their land market policies in response to national-level priorities for the agri-food sector, the relevant stakeholders and the environment, and there are potential learnings from these developments.

³ This policy goal emerged in the aftermath of the Second World War when the modernisation of agriculture was considered crucial for the economic revival of the country.

In the next section we describe some of the data sources used for this research. We describe the various methods applied in this research. This is followed by analysis of a selection of land market policies that are being implemented in other EU Member States and their possible suitability for land market policy in Ireland. This is followed finally by the conclusion section.

II DATA AND METHODS

The data for this research draw on a number of different sources 1) Teagasc National Farm Survey 2) Teagasc 2014 Land Use Survey 3) Property Services Regulatory Authority (PSRA) commercial leases register.

Data from the Teagasc National Farm Survey (NFS) are frequently used to determine the broader financial situation on Irish farms and contribute to economic and rural development research and policy analysis. The Teagasc NFS data form the Irish component of the Farm Accountancy Data Network (FADN) database, which fulfils Ireland's statutory obligation (Council Regulation (EC) No 1217/2009) to provide data on farm output, costs and income to the European Commission.

Teagasc specifies to the Central Statistics Office (CSO) the number of farms it requires for the NFS according to farm system and size class. In response, the CSO supplies Teagasc with a random sample of farm holder names and addresses in encrypted format to enable the Teagasc NFS to take place. These data are available to the CSO via Census of Agriculture data and Farm Structures Survey data, and also administrative data provided by the Department of Agriculture, Food and the Marine (Basic Payment Scheme, Animal Identification and Movement System, Sheep and Goat Census and Corporate Client System). Teagasc farm recorders visit each selected farm and collect accountancy details as part of the Teagasc NFS (CSO, 2022).

For the purposes of this research, the main analysis is based on Teagasc NFS survey data for 2019 and 2021. Farms in the pig and poultry systems are excluded due to their different demands for land use. Farms in the dairy, cattle, sheep and tillage systems are retained. For 2019, there are 891 farms included in the data, representing approximately 86,864 farms nationally. These data for 2019 are used to describe the distribution of land rental prices. Teagasc NFS data for 2021 are used to describe the duration of land rental agreements in Ireland. For 2021, there are 837 farms included in the data, representing approximately 84,981 farms nationally. Panel data for self-reported land values are included in the analysis. These data are based on the Teagasc NFS from 2002 until 2021. Details about this panel data are included in Appendix Table A.2.

Additionally, data based on the Teagasc Land Use questionnaire from 2014 are used for this research as these data contain information related to the willingness

to accept of farmer-landowners to let out some of their land and the willingness to pay of the farmers for renting-in land. This questionnaire is completely separate from the Teagasc NFS. This 2014 questionnaire was undertaken with a stratified random sample of Irish farmers, collected from a nationally representative sample of 846 farmers. In order to achieve a representative geographical spread, a starting point was randomly selected in each county with every third farmer being selected to participate in the study. The survey continued in each county until a quota of respondents in each county was reached. Quota sampling set demographic quotas on the sample based on known population distribution figures. The quotas used here were based on known population distribution figures in relation to specific farm systems (dairy, cattle rearing, cattle other, sheep, tillage and mixed) taken from Central Statistics Office data (CSO, 2012). The analysis with this dataset is concerned with the subset of farms who responded to the questions in relation to the willingness to accept or willingness to pay for participation in agricultural land rental transactions. This provides a sample of approximately 700 farmers. These survey data formed the basis for a publication on the openness of farmers to land rental transactions in Ireland (Geoghegan *et al.*, 2021).

The PSRA commercial leases register is the third source of data for this research. This register contains information on commercial land leasing transactions (including agricultural land leases) in Ireland. The dataset for this research is based on a large sample of these land leasing transactions. The dataset contains information about transactions in the West and South-East NUTS3 regions in 2019. This dataset contains 311 transactions including 203 in the South-East region and 108 in the West region. Each contract contains various types of information and provisions including rental value, dimension of the parcel, contract duration, payment frequency, type of tenant (sole trader or institution), geographical location of the parcels (county location), date of negotiations and entry into force of the contracts, and a set of provisions that affect performance (e.g. rent review, legal notice, breaking clauses, insurance and so on). For the purposes of this research, we mainly consider the value of the land rental transaction on a per hectare basis.

2.1 Methods

In this paper, we create quantile plots using the Stata software package (Cox, 2005a) to describe the distribution of land rental prices. The quantile plots indicate the median price and the prices at the 10th and 90th percentiles. The main objective is to highlight the extent of the highest land rental prices. The transactions with the highest prices are the most relevant in terms of the possibility of excessive pricing. The potential for excessive pricing is a possible motivation for the introduction of maximum land rental price regulation. In the quantile plots, the 90th percentile of the distribution is therefore highlighted.

In addition, the data from the 2014 survey are used to consider the potential importance of minimum contract duration regulation for land rental markets. This

survey contains a large number of questions in relation to farm succession planning and land market actions. The analysis in this research is based on three questions from the 2014 survey 1) whether or not the landowner prefers to lease on a short-term or medium-term basis 2) whether or not the landowner prefers to lease on a short-term, medium-term or long-term basis 3) Minimum willingness to accept of each landowner for money in exchange for letting out land. More detail on these relevant questions is included in the appendix. Based on Teagasc NFS data and PSRA data, the proportion of land rental contracts with a two, three or four year duration tends to be very low. The comparison is made between short-term (less than five years), medium-term (five to ten years) and long-term (ten years plus). Diagrams are created using the ‘lowess’ command in Stata (Cox, 2005b).

III LAND VALUES

Farmland sales markets in Ireland have been prone to bouts of excessive speculation and price inflation. In recent history, there have been two clear episodes when farmland sales prices in Ireland departed sharply from the fundamental returns to agriculture. Murphy and Nunan (1993) used auctioneer level data on land sales transactions from 1901 to 1986 and found that land sales prices departed from the fundamentals (based on present value model) during the 1970s. Roche and McQuinn (2001) used the same data and a regime-switching model to find strong evidence indicating a collapsing bubble from 1979 to 1986.

The second major departure in land sales prices from the fundamental returns to agriculture occurred during the 2000s. Geoghegan and O’Donoghue (2018) show the extent of the rapid growth in self-reported farmland values from 1998 to 2007 and the subsequent decline until 2012. Figure 1 provides an update on their analysis by showing the evolution of self-reported land values from 2002 to 2021. Figure 1 shows that self-reported farmland values more than doubled between 2002 and the height of the bubble in 2007. Farm incomes increased by far less (32 per cent) during this time (Connolly *et al.*, 2008) as farmland values departed from the returns to agriculture.

As a result of the speculative housing bubble, challenges emerged for the CSO in establishing reliable statistics for farmland sales prices. In their report for the first quarter in 2005, the CSO reported that:

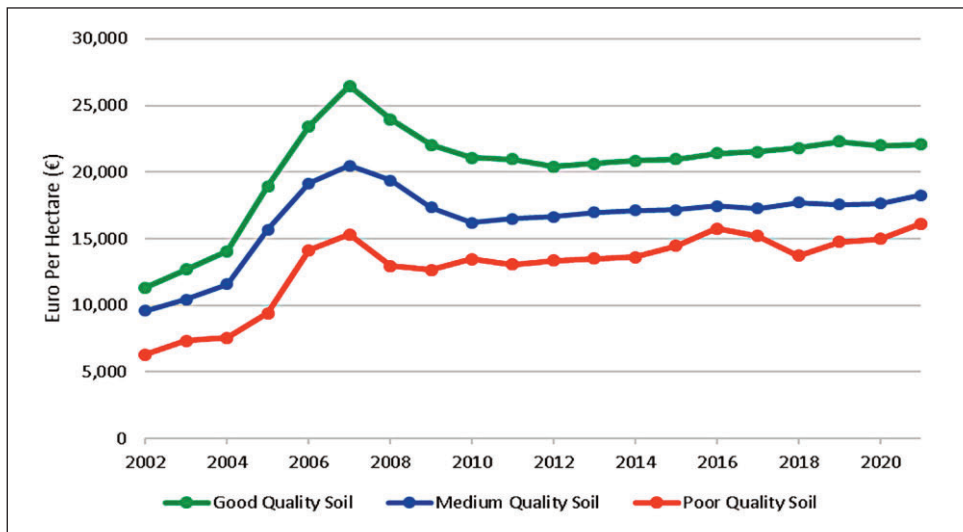
transactions outside the range €500 per hectare (€202 per acre) to €35,000 per hectare (€14,164 per acre) have been excluded on the basis that the purchaser may intend to use the land for non-agricultural purposes or that a non-market (family, relatives, etc.) element may be involved in the transaction (CSO, 2005).

The CSO imposed this condition for a number of years prior to 2005 but the condition became more important as more transactions exceeded the threshold of €35,000 per hectare.

The CSO subsequently suspended the reporting of farmland sales price statistics. The nature of the bubble impeded the reporting of reliable information about farmland prices. The availability of reliable price information can be considered to be ‘pareto improving’. However, this availability can fall apart in the case of a speculative bubble involving housing and land markets. The availability of price statistics is not a sufficient condition to prevent bubbles from emerging.

Figure 1 shows that in the aftermath of the collapse of the housing bubble in 2008, the average self-reported farmland values in Ireland declined significantly. From 2012 onwards, the farmland values increased moderately for good quality soils and remained stable for medium quality land. Farmland values increased for poor quality land between 2011 and 2016. The removal of the milk quota in 2015 did not appear to have a major impact on farmland values. However, it can be noted that milk prices declined significantly in 2015 and 2016 (Cele *et al.*, 2022) and this may have reduced the demand for additional land. Farmers may be cautious in borrowing money for land purchases given the recent experience in the early 2000s. In the aftermath of the quota removal, the expansion of the dairy sector appears to be facilitated by an increase in the volume of rental activity (Bradfield *et al.*, 2020). This lessened the reliance on land purchase as a means of land expansion.

Figure 1: Average Self-Reported Agricultural Land Values by Soil Type (€ Per Hectare) 2002-2021



Source: Teagasc National Farm Survey (Update on Geoghegan and O’Donoghue, 2018).

IV RESULTS AND DISCUSSION

The choice of alternative modelled policies is based on data availability and the policies described in the country reports from the 2021 European Commission report on land market regulation (Vranken *et al.*, 2021). In this paper, the focus is placed largely on two policies 1) Maximum rental prices 2) Minimum duration regulation.

4.1 Maximum Rental Price

Policies in relation to a maximum rental price appear evident in a small number of EU Member States including France and Belgium (Vranken *et al.*, 2021). Research points to some drawbacks associated with maximum price regulations. Heinrich *et al.* (2019) use the AgriPolis agent-based model to estimate the impact of maximum land rental prices on farm economic outcomes in the Saxony-Anhalt region of Germany and conclude that such regulations reduce regional value-added and employment. These efficiency impacts are important to consider although results can be context-specific.

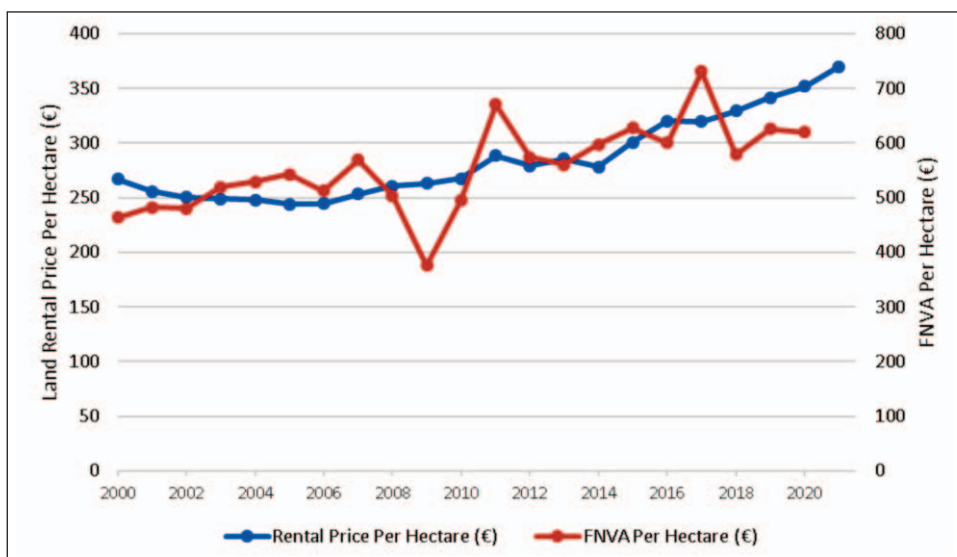
There is some evidence of regulations affecting behaviour in other negative ways. For instance, Ciaian and Drabik (2017) report that maximum price restrictions may induce an illegal (grey) market where farmers pay more ‘by offering additional unofficial payments’. Studies highlight the presence of these grey markets in the Netherlands (Claus *et al.*, 2017) and Belgium (Ciaian *et al.*, 2012). In Northern France, there appear to be some informal illegal practices in farmland transactions involving ‘pas-de-porte’ (key money) (Gault *et al.*, 2013). Barral *et al.* (2017) describes the historical roots of these practices and some of the complexities involved. Latruffe (2021) explains that such practices are authorised only in the case of transferable rental contracts ‘bail cessible’ and are otherwise punishable by law (up to two years in prison and a €30,000 penalty).

Among other things, maximum rental prices may reduce the degree of capitalisation of subsidies into land rents (Michalek and Ciaian, 2014). Previous research has found significant capitalisation of direct payments into land rents in Ireland including an estimated 41 per cent for dairy farms (O’Neill and Hanrahan, 2016). However, the primary motivation for a maximum rental price is probably due to the attempts of policymakers to protect tenant farmers and to raise the share of the economic surplus for the tenant farmer relative to the landowner. Latruffe (2021) reaches this conclusion about the objective of these policies in France. Boinon (2003) provides more detail and important nuance about this and is discussed in the introduction. In addition, the policy motivation can be linked to efforts to support the continuation of the family farming model (Ravenscroft, 1999, p. 25).

In contrast to land sales markets, land rental rates in Ireland tend to follow the agricultural returns and are much less prone to bouts of excessive pricing and

bubbles. Figure 2 shows the evolution of the average land rental price per hectare and the average Farm Net Value Added (FNVA) for agriculture in Ireland from 2000 to 2020. Figure 2 appears to confirm that land rental prices follow the underlying returns to agriculture. The trends in agricultural land rental prices from 2000 to 2021 do not point to the presence of speculative bubbles. At least in recent history, this source of market failure is not apparent in the land rental markets.

Figure 2: Average Land Rental Price and Average Farm Net Value Added (FNVA) Per Hectare 2000-2021



Source: Teagasc NFS 2000-2021 for Rental Prices and FADN Database 2000-2020 for FNVA.

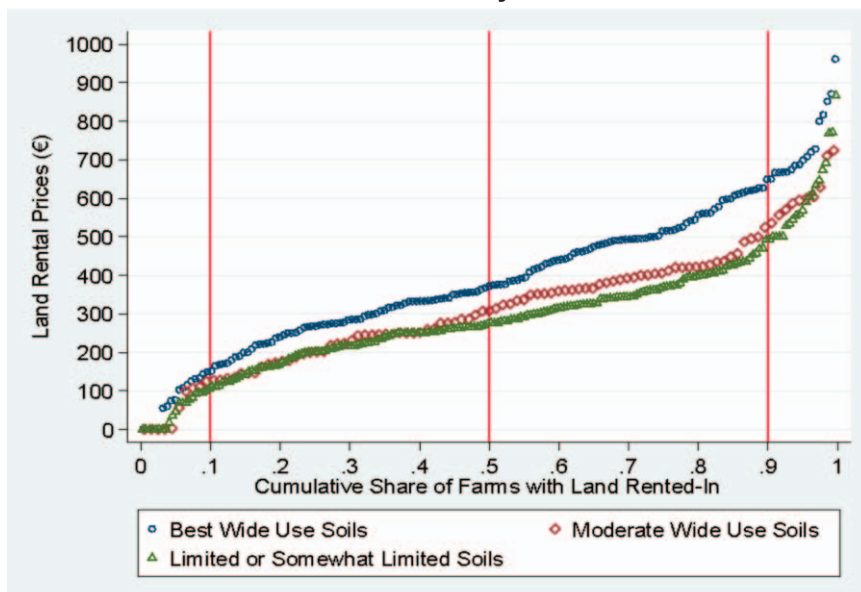
The trends in average land rental prices may not point to speculative bubbles. However, the average price statistics can mask important variation across the price distribution. Figure 3 shows the distribution of land rental prices. Emphasis is placed on the highest prices given the interest in maximum price regulation. Maximum land rental prices in Belgium and France are set according to definitions of land quality. Figure 3 therefore contains information about three different soil categories (1) Wide Use Soils (2) Moderate Wide Use Soils (3) Limited or Somewhat Limited Soils. A definition for these categories is contained in Appendix Table A.1.

Figure 3 is based on Teagasc National Farm Survey (NFS) data and shows the distribution of agricultural land rental prices in Ireland in 2019. These land rental prices include both new and old contracts. The renewal of the older contracts may not involve price renegotiation. New contracts may therefore command a higher price relative to old contracts.

Figure 3 shows that the best soil category has consistently higher land rental prices across the distribution. There appears to be little difference in land rental price between the other two categories of soil quality. There appears to be a wide distribution of land rental prices within each of the soil categories. From the perspective of a maximum rental price, the highest land prices are of most interest. Figure 3 shows that the 90th percentile of land rental prices in the wide use soil category in 2019 is approximately €650 per hectare. The median land rental price in the wide use category is €380 per hectare. On moderate wide-use soils, the 90th percentile is close to €500 per hectare.

Rental prices do not appear particularly excessive at the 90th percentile. This conclusion is based on the profitability of dairy farming during this time (Donnellan *et al.*, 2020). In a thin local land market, there is the potential for excessive pricing whereby a landowner could potentially gain a particularly large share of the economic surplus. However, the Teagasc NFS data for 2019 do not point strongly to this source of market failure. Other potential sources of market failure include the environmental externalities, which are not taken into account in the formation of bids for parcels of land. In terms of a comparison with other EU Member States, it is worth noting that the rental prices in the top 10 per cent of the distribution are above the maximum levels permitted in many regions in the Netherlands (Silvis *et al.*, 2022, p.6). However, this alone does not necessarily indicate that maximum price regulation is necessary or advisable in the case of Ireland.

Figure 3: Distribution of Farmland Rental Prices in Ireland According to Soil Quality



Source: Teagasc National Farm Survey 2019.

Figure 4 provides further insights on the potential importance of excessive pricing. Using transaction level data from the PSRA, one can see the distribution of prices for new contracts in two regions 1) South-East region 2) West region. Figure 3 showed the distribution of prices for both old and new contracts. However, there is likely to be added value in displaying the distribution of new contract prices. Figure 4 shows that the highest prices in the South-East region (top 10 per cent) exceed €800 per hectare. The top decile of rental prices in the South-East region appears high in 2019.

However, it is not clear that these prices are sufficiently high to be considered for a maximum price regulation. This conclusion is based on the profitability of dairy farming at that time with an average net margin of €1,248 per hectare reported in 2019 (Teagasc, 2020). The question of what constitutes excessive pricing for rented land to dairy farmers is far from straightforward. In particular, there is uncertainty about the future long-run profitability in this system and in the ability to distinguish between transitory and permanent improvements in the underlying profitability. For instance, in 2022, the average gross margin per hectare increased by 54 per cent and the average net margin per hectare by 71 per cent (Teagasc, 2023).

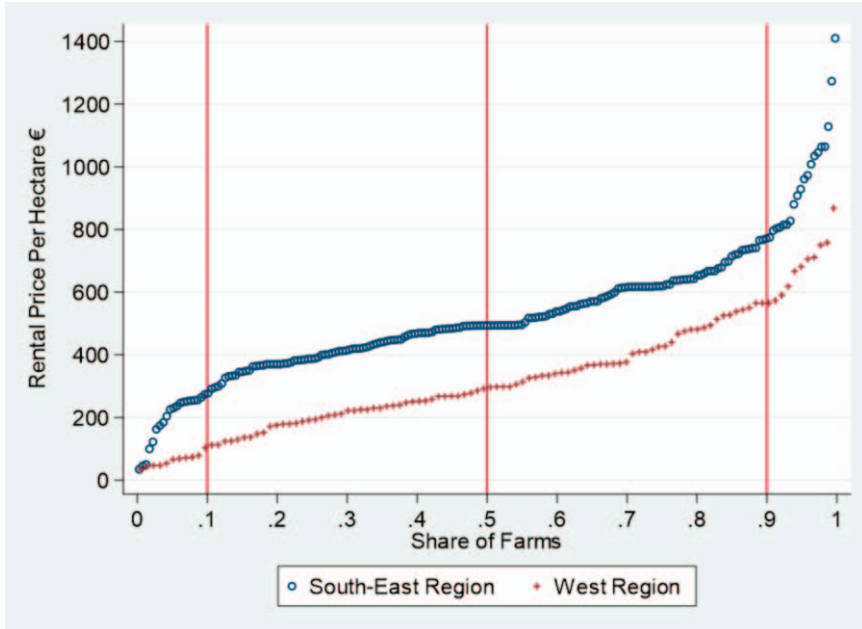
In practice, the volatile returns to agriculture can have an impact on perceptions of excessive pricing in land markets and furthermore on the updating of maximum prices in countries where these regulations exist. In the case of the Netherlands, the maximum land rental prices at the regional level appear quite volatile (Woltjer *et al.*, 2023) and this can be linked to the volatility in farm incomes. This is a practical reason against the idea of maximum rental prices.

In addition, the administration costs associated with imposing and monitoring a maximum legal price regulation need to be considered. It is difficult to assess the trade-off between the administrative costs of regulation and the benefits of preventing exceptionally high prices. In both Belgium and the Netherlands, there are well-known issues with grey markets and payments in excess of maximum rental rates. This undermines the effectiveness of maximum price regulations. However, the success of maximum price regulation could be different if the intention is to curb the most excessive pricing rather than to interfere in the equilibrium price or the division of surplus between tenant and landowner. It is widely understood that over-optimism can strongly influence farmland markets and lead to excessive pricing. In rental markets, overly optimistic tenants may commit to paying excessively high rents during times when farm incomes are expected to increase sharply.

However, the best policy response to excessive pricing in land markets appears with indirect rather than direct price intervention. For instance, the rules in relation to tax incentives could be adjusted to help reduce the likelihood of excessive pricing although the impact of such policies could be mainly on land sales markets rather than land rental markets. Land rental price statistics could be reported separately

for new contracts. The current methodology mixes old and new contracts together and does not fully reflect changes in market conditions. Land sales prices could be reported on a more frequent basis than annually.

Figure 4: Distribution of Prices for New Land Lease Contracts in 2019



Source: Authors' calculations based on Commercial Register of the Property Services Regulatory Authority (2021).

If the rental share continues to rise in Ireland over the next decade and a sufficient number of contracts appear to involve excessive prices, the case for further market regulation may grow stronger. This is based on the assumption that a larger market will involve more instances of opportunistic behaviour rather than a conclusion that interventions should reduce the rental prices below their equilibrium or prevailing values. As pointed out by Ciaian *et al.* (2010, p.34), a maximum rental price set below the market equilibrium is likely to induce a grey market. The experience of the Netherlands means that maximum price regulation can be unsuccessful even in terms of strategic objectives. In France, there appears to be less of an issue with unofficial or illegal payments, but this could be due to the strong penalties of non-compliance. Land policy in France remains strongly intent on influencing the distribution of the economic surplus between landowners and tenants. This intention does not necessarily need to be in place for maximum price regulation to be considered, as maximum prices could be set well above equilibrium or prevailing rates.

4.2 Minimum Duration

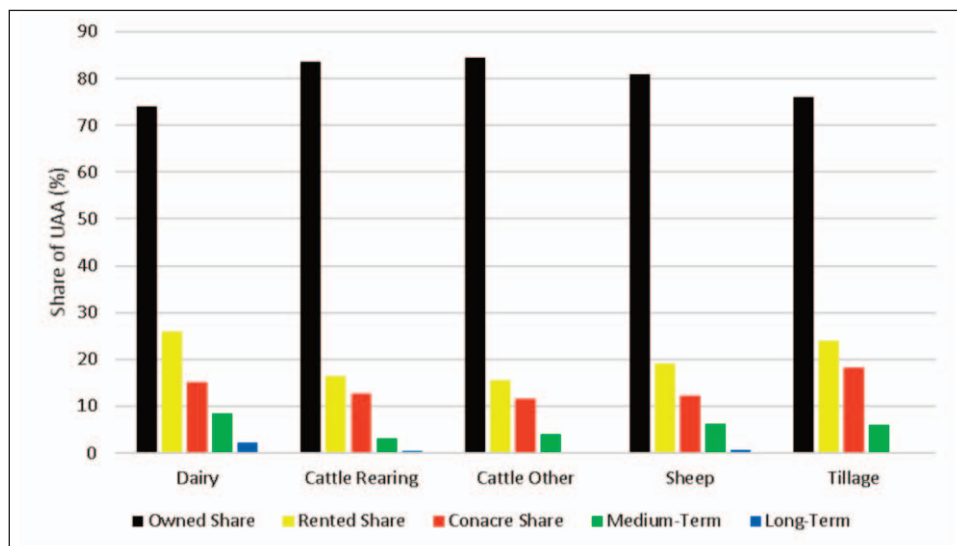
A legal minimum contract duration represents an effort to protect the interests of tenant farmers (Swinnen *et al.*, 2016) and long-term leasing can contribute to the objective of raising farm productivity (Adenuga *et al.*, 2021). Numerous studies point to the possible positive relationship between contract duration and farm performance (Sklenicka *et al.*, 2015; Leonhardt *et al.*, 2019). Short-term conacre lettings remain quite popular although this is probably diminishing through time. In assessing the possible impact of a minimum legal duration, it seems best to consider the current treatment of medium (5-10 year) and long-term (10 year plus) leasing in Ireland. The exemptions for rental income are an important consideration and the minimum duration for qualification for these tax incentives is five years (Geoghegan *et al.*, 2018).

Official data on the number of revenue cases availing of the tax exemptions for medium and long-term lease transactions are available through Revenue (Revenue, 2024). Appendix Figure A.1 shows the evolution in the number of revenue cases availing of the tax exemption (contracts have a minimum of five years) from 2009 to 2021. A substantial increase is observed in the number of qualifying revenue cases from 3,230 in 2009 to 12,990 in 2021, an increase of 302 per cent over this time. This suggests that the expansion of tax incentives in 2015 has contributed to an increase in land leasing activity although the removal of the milk quota and the rise in land rental prices are likely to be important confounding variables.

Figure 5 shows the share of Utilisable Agricultural Area (UAA) rented in each farming system and according to the contract duration. Figure 5 shows that short-term rental contracts remain the most prevalent for agriculture in Ireland. This is particularly evident for the tillage farming system where approximately 18 per cent of the UAA is rented on a short-term basis. The rental share is highest on the dairy farming system (26 per cent). Short-term rental agreements account for the majority of this activity. However, approximately 10 per cent of the UAA in the dairy farming system is due to medium and long-term land rental contracts. Rental activity is less prevalent on drystock cattle and sheep systems. The expansion of long-term leasing is particularly important for the dairy sector, and for new entrants and generational renewal in dairy farming (Kelly *et al.*, 2020, p. 312).

Despite the expansion in medium and long-term leasing in the land rental market in Ireland, the short-term arrangements continue to account for the majority of the land rental area. The continued importance of short-term rental agreements may be due to historical factors rather than due to the preferences of current landowners.

The 2014 Teagasc Land Use Survey included questions in relation to the preferences of farmers to let out land via conacre, medium (5-10 years) or long-term lease (more than 10 years). Table 1 shows that the vast majority of respondents (80 per cent) expressed a preference for letting out land via medium-term lease as opposed to conacre and approximately 74 per cent express a preference for long-

Figure 5: The Share of UAA Rented by Duration and Farming System

Source: Authors' calculations using Teagasc National Farm Survey 2021.

term lease over conacre. This indicates that the previous dominance of conacre is due to historical factors rather than the actual preferences of landowners in the 21st century.

Table 1: Number of Farmers with Preference for Letting Out Land via Conacre or Lease

	Number of Farms	
	Medium-Term Lease	Long-Term Lease
Conacre	138	178
Lease	568	517
Total	706	695

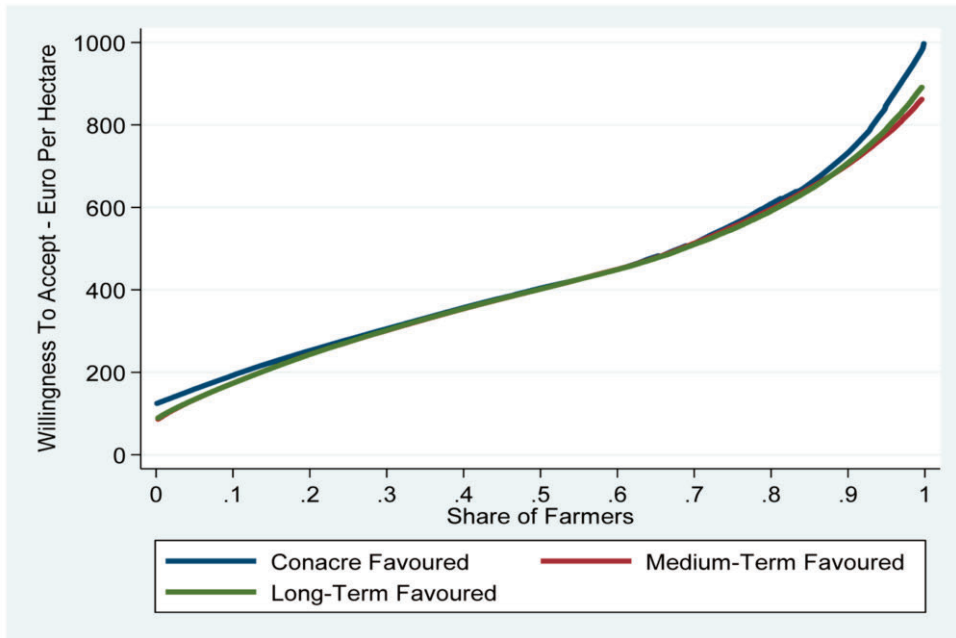
Source: Teagasc Land Use Survey 2014.

One may anticipate that the duration of the land lease is associated with land rental prices. Hüttel *et al.* (2016) explored this relationship in the case of Germany, and their results point to the important role of optimism/pessimism about the returns from farming. Hüttel *et al.* conclude that land rental price statistics based on simple averages of lease rates can be biased where the time of the contract formation and/or the contract length are ignored.

In order to explore this term-structure, Figure 6 shows the distribution of the willingness to accept of farmer-landowners to let out farmland according to whether

or not the landowner prefers the option of letting-out conacre over the medium or long-term lease. This diagram indicates that the willingness to accept is similar across most of the distribution regardless of the favoured duration of the land rental contract.

Figure 6: Willingness to Accept of Farmer-Landowners in the Agricultural Land Rental Market



Source: Authors’ calculations using Teagasc Land Use Survey 2014.

Due to data availability, this research has excluded some particularly noteworthy land market regulations existing in other EU Member States. One such regulation is the environmental lease, which is evident in France (Hermon, 2015). Environmental tenure contracts could potentially be promising to encourage more sustainable farming in Ireland. However, little research has been conducted to analyse their potential impact on land use change in France (Andreoli *et al.*, 2022). Data for organic farms or farms with no chemical nitrogen application could be used to assess the possible impact of an environmental lease regulation. It is likely that strong incentives would need to be offered to both landowner and tenant to undertake an environmental lease arrangement, but the advantages would need to be considered in light of the national level targets for GHG emission reduction. Chervier *et al.* (2022) briefly describe some of the incentives pertaining in France including a reduced rent, but more substantial incentives may be required in the context of agriculture in Ireland.

Pre-emptive rights are an important land market regulation in a number of EU countries (Vranken *et al.*, 2021). In Italy, the pre-emptive rights in the case of land sales go to the following subjects in a particular order 1) the co-owner 2) the tenant (whose contract is active for at least two years) and 3) the neighbouring farmers, as long as they can be classified as “family-based farmers” or “professional farmers” under the Italian Law. In rental transactions, landowners may seek a commitment from the tenant to release land after the end of the contract and this could be interpreted by judges as a waive of pre-emptive rights (Sckokai, 2021). In France, tenants have pre-emptive rights to purchase land and pre-emptive rights exist in various forms in other EU Member States (Vranken *et al.*, 2021).

In France, there are many regulations dealing with the duration of land lease agreements including minimum duration (Adenuga *et al.*, 2021), with some policies designed to facilitate a limited number of short-term rental agreements. FAO (2022, p. 31) describes a temporary leasing agreement known as ‘*le bail SAFER*’ and a related practice of ‘lease intermediation’. These temporary agreements are facilitated where a retiring landowner wishes that their land is farmed until a descendant is in the position to take over the farm. In addition, these agreements can be facilitated where a local authority has a stock of land aimed for housing construction and wishes that the land be farmed until the beginning of the project. One of the main learnings from the French policy of *le bail SAFER* is that special consideration can be given for older landowners nearing retirement. This type of policy could also cater for the group of already retired farmers where there may be a greater reluctance to commit to long-term contracts. The context is very different in France where landowners and tenant farmers tend to be separate entities.

Elsewhere, Bradfield *et al.* (2023) propose the idea of expanding the tax incentives for land leasing to cover all farm income as distinct from the income solely from renting out land. This policy idea has potential to increase the supply of farmland from older farmers who are interested in letting out a proportion of their land while staying active in farming. It would be important to ensure that large landowners are not in a position to exploit well-intentioned taxation policies in order to gain excessive rental income. This means that policy reforms or regulations need to consider the influence of institutional, or more specifically non-farming incorporated entities, in agricultural land markets.

In Budget 2024, the Government in Ireland announced reforms in relation to the tax exemptions for leasing agricultural land. Specifically, the reforms involve a seven-year holding requirement for purchases of farmland, which occur on or after January 1, 2024. This reform will therefore restrict the availability of the income tax relief (Revenue, 2023). This reform may be considered as an attempt to reduce the leakage of tax exemptions to institutions speculating in farmland markets.

V CONCLUSIONS

Agricultural land markets in Ireland have operated without significant regulation since the Land Commission ceased acquiring land in 1983. Based on lessons from other EU Member States and economic theory, this research provides an initial exploration of the case for specific land market regulations including maximum land rental prices and minimum land rental contract duration.

This research is focused on lessons from other EU Member States in terms of land market regulation. In the case of France, it appears that land market regulations are successful in meeting some stated objectives. These regulations are part of a wider land market policy concerned with increasing efficiency and structural change and appear to be strictly imposed. In the case of the Netherlands and Belgium, the imposition of maximum land rental prices is associated with a grey market. Inter-country comparisons of land market regulation need to take into account the degree of compliance and enforcement with regulations. Recent studies suggest that Ireland has one of the least regulated land markets in Europe. However, the extent of the difference between countries may be exaggerated if the degree of compliance and enforcement are not taken into account.

Farmland rental prices in Ireland have mainly followed the underlying returns to primary agriculture (Figure 2) and been much less influenced by speculative bubbles relative to farmland sales markets (Figure 1). There does not appear to be an economic case for policies which directly limit the growth of average land rental prices. If excessive pricing emerges on a large scale in the land rental market, the best policy response appears indirect rather than direct price intervention.

There is the potential for an increase in the number of farmland transactions involving excessive pricing during periods when there are high levels of uncertainty and fluctuations in farm profitability (Duffy, 2011). The experience of the late 1970s and early 2000s in Ireland shows that land sale prices can depart significantly from agricultural returns. The potential for disequilibrium appears greater in an increasingly risky and uncertain environment. Improvements in the reporting of land price statistics can assist market participants in making better informed decisions. However, the experience of the early 2000s is that the availability of official price information is not a sufficient condition for the prevention of speculative bubbles. Official statistics are available in relation to land rental and sales prices in 2022 (Eurostat, 2024b). However, there is a need for this information on the distribution of both land rental and land sale prices and possibly on a quarterly rather than annual basis in the case of land sales.

Farm-level data indicate that the practice of *conacre* and short-term letting is mainly due to historical factors and does not represent the preferences of farmer-landowners in modern Ireland. However, minimum duration regulations do not currently appear to be a practical option for agriculture in Ireland and this is partly due to the continued high prevalence of *conacre* letting. Experience from the

Netherlands and other EU Member States shows that the demand for short-term land lettings will always be evident. Temporary land leasing agreements will always be needed to deal with the complexities associated with land transfer and the flexibility sought by landowners and tenants. National level strategy is to expand the area of farmland allocated to the tillage sector (DAFM, 2022) and the flexibility provided by short-term letting remains important for this particular sector.

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APPENDIX

Table A.1: Description of Soil Categories in the Teagasc NFS

<i>Soil Category</i>	<i>Description</i>
Best Soils Category	Soils of wide use range have no limitations, which cannot be overcome by normal management practices.
2nd Best	Moderately wide use-range refers to soils with minor limitations such as coarse texture, moderately high altitude, less favourable climatic conditions, somewhat shallow depth, hummocky topography and somewhat weak structure.
3rd Best	The somewhat limited use range category is used for soils with similar limitations to those of Class 2 but these are present to a greater degree. For example, soils with altitude limitations in this category usually occur between 150 m and 365 m, whereas those of the moderately wide use range with altitude limitations are at elevations mostly between 90m and 150 m.
4th Best	Soils in this category are generally unsuited to tillage but suited to a permanent grassland system. The predominant limitation is poor drainage.
5th Best	This class contains those soils whose agricultural potential is greatly restricted. They are widespread in the Western and North-Western regions, particularly in the mountain zones where high altitude and steep slopes are major limitations.

Table A.2: Sample Size according to Soil Quality for Land Values Statistics

<i>Year</i>	<i>Good Quality Soils</i>	<i>Medium Quality Soils</i>	<i>Poor Quality Soils</i>	<i>Total</i>
2002	594	503	115	1,212
2003	627	491	130	1,248
2004	622	487	142	1,251
2005	598	454	130	1,182
2006	589	444	122	1,155
2007	597	449	120	1,166
2008	603	422	130	1,155
2009	570	421	123	1,114
2010	512	352	99	963
2011	554	350	97	1,001
2012	520	328	98	946
2013	528	338	85	951
2014	509	327	79	915
2015	514	366	102	982
2016	495	326	73	894
2017	477	351	69	897
2018	473	362	70	905
2019	464	355	67	886
2020	420	353	69	842
2021	415	361	61	837
Total	10,681	7,840	1,981	20,502

Source: Teagasc National Farm Survey.

Table A.3a: Average Land Rental Prices (€ Per Hectare) by Region [Arable Land]

	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>
National Level	366	397	422	378	420	448	466
North and West	364	351	536	456	477	519	471
Southern	390	467	387	345	412	446	512
Eastern and Midland	322	320	340	341	370	390	408

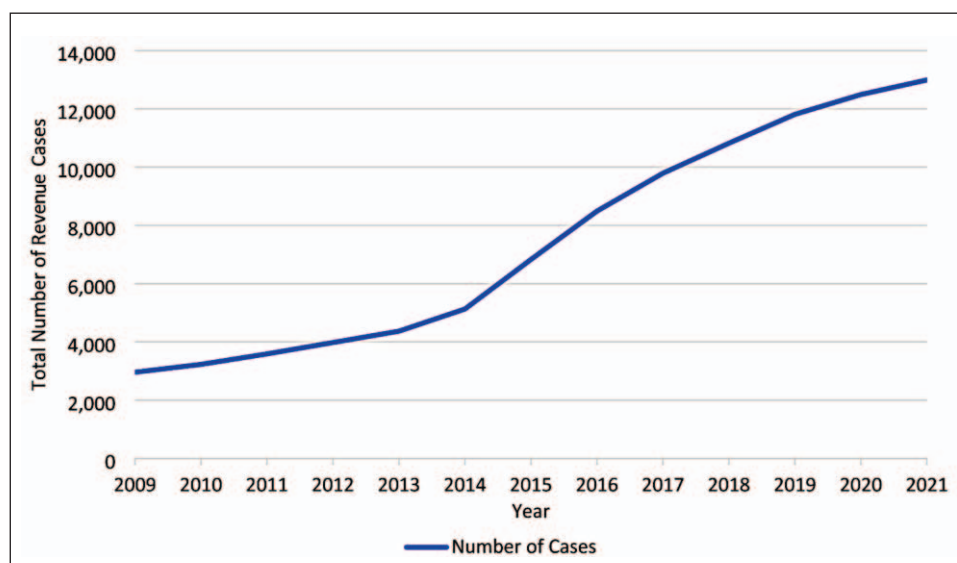
Source: CSO (2022).

**Table A.3b: Average Land Rental Prices (€ Per Hectare) by Region
[Permanent Pasture Land]**

	2015	2016	2017	2018	2019	2020	2021
National Level	260	266	280	292	297	313	337
North and West	194	209	220	232	232	219	229
Southern	292	289	303	316	321	370	426
Eastern and Midland	283	295	314	324	336	335	377

Source: CSO (2022).

Figure A.1: Total Number of Revenue Cases Qualifying for Rental Income Relief 2009-2021



Source: Revenue (2024).