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AN ANALYSIS OF IRISH FARMING IN 1980 BASED ON THE COMMUNITY TYPOLOGY OF AGRICULTURAL HOLDINGS

G O'HANLON AND J TREACY
Central Statistics Office

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1 INTRODUCTION

In order to provide comparable data on the structure of agricultural holdings at Community level harmonised surveys have been undertaken under the provisions of special Council Regulations and Directives[1] These surveys, which are commonly referred to as the Farm Structures Surveys were carried out in Ireland for the first time in 1975 and subsequently in 1977, 1980 and 1983 Further surveys are planned for 1985 and 1987 The basic information collected relates to the physical characteristics of the holding, namely, areas under crops, numbers of livestock, numbers and types of machinery used and labour input employed

In addition to the physical analyses which may be derived from these surveys a system has been developed for classifying holdings as a common basis This system is designed to identify relatively homogeneous groups of holdings by reference to economic criteria concerning two characteristics of the holding its type of farming and its economic size expressed in terms of its imputed total Gross Margin Measurement in terms of Gross Margin was achieved by applying standard coefficients in the form of Standard Gross Margins (SGM), which were estimated per hectare and per animal on a regional basis, to the physical size of the holding The classification scheme is referred to as the Community Typology of Agricultural Holdings and is outlined in detail in Commission Decision 78/463/EEC [2]

In this paper the results of the 1980 survey for Ireland, which are the most recent available, are examined using the Typology Some comparisons are also made with the situation in 1975

The paper is presented in three parts Part 2 outlines how the 1980 survey was undertaken and the extent to which it covers Irish farming The Community Typology is introduced and discussed in Part 3 and the results of the analysis are presented and discussed in Part 4 As a number of the tables of results are rather large and detailed they are shown for convenience in Annex 1

2 SURVEY METHODOLOGY AND COVERAGE

In June 1980 a Census of Agriculture was undertaken involving the enumeration of all agricultural land holdings in the State In the Census information was sought on agricultural activity, e g , land utilisation, numbers of livestock, machinery used, etc , and separate returns were required from all agricultural landholders owning at least ¼ acre The enumeration was conducted by some 3,000 specially recruited enumerators each of whom was responsible for accounting for all the land in an assigned District Electoral Division (DED) As there was a large overlap in the data requirements of the Census and the Farm Structures Survey (FSS) it was obviously desirable to link them together in the one field operation It would have been ideal to include all holdings in the FSS, however, for practical reasons, this was not possible On the one hand, the collection of the extra FSS information from each holding would have been a severe imposition on both the landholders and the enumerators and on the other hand, would have presented the CSO with considerable volumes of data to process It was therefore decided to restrict the FSS to a sample of the holdings over 1 acre in total size enumerated in the Census

Sample Selection

In advance of the 1980 enumeration, holdings were selected for inclusion in the FSS from lists compiled in the course of enumerations conducted in earlier years An overall sample of around 38,000 holdings (i e , 14 15 per cent of the total) was projected and it was calculated that this size of sample would allow state estimates to be made for the main items with a sampling accuracy of between 1 and 5 per cent at the 95 per cent confidence level In order to maximise the accuracy of the sample estimates, variable sampling fractions were used varying from 1 in 20 for holdings not over 15 acres to complete coverage of holdings of 200 acres or more The optimum sampling fractions were calculated using the results from earlier surveys to assess the contribution of the holdings in individual size groups to the overall variability of the estimates for some of the main items Using these sampling fractions independent samples were systematically selected within each size group in each DED

In addition, special arrangements were made to include in the sample large pig and poultry units (i e , those with 1,000 or more pigs or poultry) in order to overcome the sampling problems associated with covering concentrated enterprises such as these in a multi purpose survey The following table compares the number of usable FSS returns with the total number of holdings enumerated in each size group in the 1980 Census of Agriculture

The number of usable returns accounted for over 93 per cent of the holdings identified for inclusion in the survey – the shortfall being accounted for, in the main, by changes in the lists used to select the original sample and by enumeration problems in a small number of DEDs To this extent the CSO was satisfied that the 35,639 usable returns were representative of the overall population and that the effect of any possible bias due to non-response/non coverage was minimal and could in general be ignored

Table 1 *No of Holdings in the State Compared to the Number in the FSS Sample – 1980*

Size of Holding	No enumerated in Census (a)	No included in FSS (b)	(b)/(a) %
>1 - ≤15 acres	61,956	2,775	4 5
>15 - ≤30 acres	57,870	3,63[illegible]	6 3
>30 - <50 acres	56,19[illegible]	5,947	10 6
>50 - ≤100 acres	57,649	9,318	16 2
>100 - ≤150 acres	16,954	5,300	31 3
>150 - ≤200 acres	6,507	2,981	45 8
>200 acres	6,446	5,686	88 2
Total	263,558	35,639	13 5

Because of the higher coverage of larger holdings the sampled holdings accounted for approximately 30 per cent of the total land on holdings over 1 acre in the State

Grossing Methodology

Grossing factors were calculated for each County x Size of holding cell by using the ratio of the total number of holdings enumerated to the number included in the sample in each of these cells In this way exact correspondence was achieved between the FSS estimates of the total number of holdings and the recorded Census figures

Adjustment of Survey Results to EEC Field of Survey

Unlike the system of enumeration in Ireland, where the holding is defined on an owner ship basis, the survey unit for the purposes of the EEC surveys is defined on an area worked or farmed basis In addition, survey units with less than 1 hectare utilised for agriculture (i e , crops plus pasture plus rough grazing land in use) and whose standard production did not exceed certain minimum limits are excluded from the scope of the EEC survey In order to meet the EEC requirements, additional information on land let and land taken was collected from the sampled holdings and the results for individual holdings were converted from and "ownership" to a "farmed" basis using the simple identity

Area farmed = Area owned + Area Taken – Area Let

To avoid confusion the holding defined on a "farmed" basis shall in future be referred to as a *farm*

In adjusting to the EEC field of survey, holdings which were totally let (i e , no land farmed) and farmed units under the minimum threshold had to be removed from the sample The effects of these adjustments, on a grossed basis, may be summarised as follows –

Number of holdings over 1 acre enumerated in Census	263,600
Estimated number of holdings totally let	30,300
Estimated number of farms below EEC threshold	9,800
Estimated number of farms within EEC field of survey	223,500

It must be pointed out that, while details of agricultural activity on totally tenanted farms (i e , operated by non landholders) were collected from the landholder in the Census, it was not possible to include these farms in the survey since no information was available on the characteristics of the farmer, etc From data available from the survey it is estimated that these farms accounted for approximately 274,000 hectares or 5 per cent of the total area used for agriculture in the State in 1980

Table 2 *Comparison of Grossed FSS Farm Estimates for Main Crop and Livestock Items with 1980 Census Totals*

	Unit	1980 Census results (A)	1980 FSS grossed estimates for farms (B)	(B)/(A) %
CROPS				
1. Wheat	1,000 ha	53 0	52.3	98 7
2. Barley	" ha	366 3	335 7	91 6
3 Oats	" ha	24.5	26.0	106 0
4. Potatoes	" ha	41 6	35 3	85 0
5 Sugar Beet	" ha.	33 0	32 3	98.0
6 Crops and Pasture - Total	" ha	4,695 7	4,361 5	92 9
7 Rough Grazing in Use	" ha	1,008 7	687 0	68.1
8. Area used for agriculture (= 6 + 7)	" ha	5,704 4	5,048 5	88 5
LIVESTOCK				
9. Total Cattle	" head	6,908 9	6,870 8	99.4
10. Dairy Cows	" head	1,583 3	1,614 9	102 0
11 Other Cows	" head	459 9	465 2	101 2
12. Sheep	" head	3,291 5	3,301 3	100.3
13 Pigs	" head	1,030 5	1,009 2	97.9
14. Poultry	" head	9,903 3	9,604 9	97.0

In Table 2 grossed estimates for the main crop and livestock items on farms within the EEC field of survey are compared with the corresponding figures from the Census of Agriculture As a general remark it must be remembered that the FSS estimates are

subject to sampling errors, the level of which vary according to the variability of the item being measured

In addition since 5 per cent of the total area used for agriculture (AAU) is on totally tenanted farms, items where the FSS estimates accounted for around 95 per cent of the Census total can be considered to be in line with expectations The following remarks are therefore confined to those items in the above table where the coverage differed significantly from the 95 per cent mark –

Barley Most of the shortfall is accounted for by the relatively high pro portion of barley sown on leased land – this reflects the attractive ness of cereals as a cash crop to leasees

Oats The overestimation of the area under oats is mainly accounted for by the apparent over representation in the FSS, due to sampling error, of the relatively small number of holdings growing oats in Eastern areas The absolute difference was, however, less than 1,500 ha

Potatoes The large discrepancy here is mainly accounted for by the fact that potatoes sown on holdings of over 1 acre accounted for less than 93 per cent of all potatoes sown in 1980 – the remainder being accounted for mainly by holdings between ¼ acre and 1 acre in size In addition potatoes were also a relatively popular crop on leased land

Crops and Pasture Total In addition to the 5 per cent on totally tenanted holdings, account has to be taken of crops and pasture not on holdings over 1 acre in size, i e , on holdings between ¼ acre and 1 acre and on agricultural land not on holdings (e g , commonage)

Rough Grazing in Use Almost all the shortfall here is accounted for by the land held in commonage which is normally classified as Rough Grazing in Use

Cattle and Sheep The higher than expected figures for these items mainly reflect the relatively fewer numbers of livestock, particularly dairy cows, held on leased land

3 THE COMMUNITY FARM TYPOLOGY

There are three basic elements of the Community Farm Typology namely, (i) the standard gross margin (SGM), (ii) the type of farming nomenclature and (iii) the economic size classification and they are introduced and discussed in the following paragraphs The description is, of necessity, a summary of the full description which is given in Commission Decision 78/463/EEC

(i) Standard Gross Margin (SGM)

The *gross margin* of an agricultural enterprise is the value of *gross production* from which the *corresponding specific costs* are deducted

Gross production includes the value of primary and secondary products, evaluated at farm gate prices (excluding VAT) and includes all relevant subsidies The specific costs consist of the following –

(a) Crop production
- seeds
- fertilizers
- crop protection products
- various specific costs including
  - heating (not including motor fuels and lubricants)
  - drying
  - specific marketing costs
  - specific insurance costs
  - other specific costs

(b) Livestock production
- livestock replacement costs
- feedingstuffs
- various specific costs including
  - veterinary fees
  - costs of servicings, performance testings, etc
  - specific marketing costs
  - specific insurance costs
  - other specific costs

The specific costs are determined on the basis of delivered to farm prices (excluding VAT) less any subsidies linked to these costs

As it was not feasible to calculate gross margins on an individual farm basis recourse had to be made to applying coefficients in the form of standard gross margins (SGM) to the physical size of the various enterprises found on the farm These SGM coefficients were calculated so as to reflect the estimated ***average*** gross margins obtained by <u>all</u> farms for each enterprise in a given region over a specified production period (i e , a calendar or crop-year) The SGMs were normally determined on a "per hectare" basis for crops and a "per head" basis for livestock For the 1980 survey the SGMs applied were calculated as the average of the SGMs estimated for each of the years 1978 to 1980 inclusive Throughout the Community the SGMs were established in national currencies for individual regions following standard procedures and were subsequently expressed in ECU using average exchange rates over the three year reference period The SGMs established are published in Commission Decision 84/260/EEC[3]

(Similar SGMs for the reference period 1972–1974 are given in Commission Decision 78/463 and these were used for surveys prior to 1980)

In Ireland SGMs were established for two regions, namely, Munster/Leinster and Connacht/Ulster The estimates were prepared by the Department of Agriculture and An Foras Taluntais on the basis of information derived from the Farm Management Surveys and other sources In Annex 2 the SGMs established for the two regions for the 1978 1980 period are set out It might be noted that the SGMs for the two regions differ only for certain items which are marked in the Annex

Particular reference needs to be made to the treatment of fodder crops (including grass for grazing) the SGM for these crops is normally zero, the specific costs being deducted when calculating the SGM of grazing livestock In farms with no grazing livestock non zero SGMs have been applied to these crops in the normal manner in all countries other than Ireland and the UK, this latter situation arising because of the almost negligible sale of these crops by such holdings in these countries The effect of this approach on the type of farming nomenclature in particular will be discussed later on

Before moving on to the application of the SGMs in the typology scheme it is essential to sound a note of caution in respect of their interpretation[1]

The purpose of the SGMs is to allow comparisons to be made in *relative* terms between different enterprises within a farm and between farms in respect of overall economic size They should not therefore be seen as a means of establishing absolute indicators of nominal income for individual farms as they are clearly not designed for this purpose

(ii) Type of farming nomenclature

The nomenclature has the following hierarchial structure –

Level 1 – ***general types*** (of which there are 8)
Level 2 – ***principal types*** (of which there are 17)
Level 3 – ***particular types*** (of which there are 54)

The basis of the classification is the proportion of a farm's total SGM accounted for by individual enterprises or combinations of homogeneous enterprises Farms fall into either "specialist" or "mixed" categories The "specialist" farms derive over two thirds of their total SGM from a particular enterprise (or group of related enterprises) and fall into general types 1 to 5 inclusive while "mixed" farms are included under general types 6 to 8 inclusive

In Annex 3 a brief description of the composition of the general and principal types is set out While it is not proposed in this paper to discuss these definitions in detail, it must be remembered that they have been devised to monitor farming throughout the Community and, as such, must differ from what an "ideal" classification, defined for national purposes only, might be

(iii) Economic Size Classification

The economic size of a farm is defined as the sum of the SGMs of all its enterprises For purposes of classification, economic sizes are expressed in a Community unit of measure, European Size Units (ESU), whereby one ESU equals one thousand ECU of total SGM The purpose of the classification is to compare the *relative* size of holdings in economic terms rather than provide a means of determining absolute incomes, etc

4 RESULTS

It should be noted that the data presented are estimates based on sample surveys and are therefore subject to sampling and other survey errors Care should therefore be taken in interpreting the figures particularly for cells where the absolute number of farms covered is small For completeness estimates of the numbers of farms are presented in all cases, however no further estimates are given for cells where the grossed number of farms covered is less than 50 as they are particularly susceptible to sampling errors

Classification by Type of Farming

In Table 3 the estimated number of farms and area used for agriculture are classified by Principal Type Separate results are given for the Less Favoured Areas (LFA) which, for the purposes of the Survey, have been defined as Connacht plus Ulster plus Counties Clare, Kerry and Longford and the Western part of County Cork This LFA designation corresponds to the Western Region defined in the Annex to Directive 75/272/EEC[4] which defines, for Community purposes, the less favoured farming areas in Ireland It was not possible to identify in the survey the other less favoured areas (i e , the mountain sheep grazing lands in the Eastern Region) which are also designated in Directive 75/272 The average size of farm is also given in each case

While it is to be expected that, in a typology scheme designed to cover farming through out the Community, Irish farming would be concentrated into certain groups, the extent of the concentration evident from the table is, nevertheless, striking! In the state as a whole 80 per cent of the farms specialised in grazing livestock enterprises (i e , obtaining at least two thirds of their total SGM from grazing livestock) and these are detailed under General Type 4 In addition a further 7 per cent of farms were involved in mixed farming where grazing livestock enterprises account for at least one third of the total SGM (see Principal Types 71 and 81) Of the remaining holdings almost 7 per cent were in the "unclassified" category The "unclassified" group consisted almost entirely of farms on which there were no livestock at the time of the survey and where the area used for agriculture consisted of fodder crops, i e , mainly permanent pasture or meadows or rough grazing land Since the SGMs for these items were zero the total SGM of these farms was also zero and hence they were not amenable to classification In particular, it was not clear whether the farms were idle for a long or short period of time If the latter was the case then it is generally felt that the farms would normally have grazing livestock on them at other times of the year If the unclassified farms were excluded then it can be seen that farms deriving at least a third of their total SGM from grazing livestock accounted for around 92 per cent of the remainder The degree of concentration is

Table 3 *No of Farms, Area Used for Agriculture (AAU) and Average AAU per Farm Classified by Principal Type – 1980 (Ireland and the Less Favoured Areas)**

	Principal Types	IRELAND			LESS FAVOURED AREAS*		
		No of Farms (000)	AAU (000 ha)	Average AAU (ha)	No of Farms (000)	AAU (000 ha)	Average AAU (ha)
11	Cereals	5 9	198 8	33 8	0 6	12 7	22 0
12	Field crops, other	5 8	133 3	22 8	2 1	22 2	10 6
21	Horticulture	0 2	1 2	7 6	0 0	+	+
31	Vineyards	-	-	-	-	-	-
32	Fruit/permanent crops, other	0 3	3 7	12 5	0 0	+	+
41	Cattle, dairying	62 8	1,542 9	24 6	35 0	672 7	19 2
42	Cattle, rearing/fattening	65 6	1,301 6	19 8	44 6	759 2	17 0
43	Cattle, mixed	27 3	576 3	21 1	19 7	335 2	17 0
44	Grazing livestock, other	22 7	620 6	27 3	16 8	443 4	26 4
51	Pigs	0 5	10 6	20 1	0 2	4 3	27 1
52	Pigs and poultry, other	0 9	7 8	8 4	0 5	5 0	9 7
61	Horticulture and permanent crops	0 0	+	+	-	-	-
62	Mixed cropping, other	0 7	23 2	34 0	0 1	2 5	21 3
71	Partially dominant grazing livestock	1 7	40 3	23 3	0 9	13 0	14 1
72	Mixed livestock, other	0.6	16 0	28 0	0 3	6 7	26 0
81	Field crops and grazing livestock	14 1	439 3	31 1	5 2	77 4	14 8
82	Crops - livestock, other	0 3	8 3	25 8	1 0	1 4	10 1
99	Unclassified	14 0	124 5	8 9	7 9	71 0	9 0
	Total	223 5	5,048 5	22 6	131 1	2,427 8	18 1

*Less Favoured Areas are defined as Cornacht + Ulster + Clare + Kerry + Longford + part of Cork

+ Grossed number of farms less than 50

greater in the LFA than in other areas with the relevant percentages being 97 and 87 per cent respectively These levels compare very sharply with other EEC countries where the overall average, based on 1975 data for EUR 9, was around 42 per cent with Luxembourg and the UK, with levels of 77 and 68 per cent respectively, being nearest the then Irish figure of 95 per cent

The most popular enterprise was "Cattle, rearing/fattening" (Principal Type 42) which accounted for over 29 per cent of all farms while "Cattle, dairying" (Principal Type 41) was a close second accounting for 28 per cent of farms It is noticeable, however, that outside the LFA, Principal Type 41 was the most common enterprise, accounting for 31

per cent of farms compared to 23 per cent for Principal Type 42 Of the 22,700 farms in Principal Type 44 ("Grazing livestock, other") almost 4,000 were specialist sheep farms (i e , sheep accounting for at least two thirds of the total SGM) and 75 per cent of these farms were in the LFA

The average size of farm, expressed in terms of AAU, was 22 6 ha in the State as a whole, however the average size in the LFA, at 18 1 ha, was only around 62 per cent of the average size of 29 3 ha in the rest of the country This difference in average size occurred for all the major Principal Types with it being particularly marked in the cases of Principal Types 11, 12 and 81 Overall, farms specialising in cereals (Type 11) and in mixed field crops and grazing livestock (Type 81) tended to be above average in size whereas farms, specialising in intensive farming (e g , horticulture and pigs and poultry) were significantly below the average

In order to facilitate the presentation and analysis of results, the smaller Principal Types have been grouped into a residual category, i e , covering Types 21, 32, 51, 52, 61, 62, 71, and 72 In total this group accounted for only 4,900 farms or just over 2 per cent of total farms in 1980 In addition Principal Types 81 and 82 have been combined and presented as General Type 8 For reference purposes the types thus presented will be referred to as *Irish Types* in the remainder of this paper

In the following paragraphs the Irish Types – are examined in some detail with particular reference to characteristics of the holder and extent to which they are involved with individual crops and livestock Separate analyses are presented in each case for the State and the LFA For convenience the detailed tables are contained in Annex 1 and are labelled alphabetically

Characteristics of the Holder

In Tables A and B, farms where the holder was a natural person (i e , excluding institutions and commercial concerns) are classified by age of holder, time devoted to farming by the holder and by whether the holder had another gainful activity In relation to the analysis of time devoted to farming the classification is made by reference to the annual work unit (AWU) which, for the holder, is equivalent to 2,200 hours per annum Data on hours worked were collected in the survey by seeking information on the approx imate number of weeks and the average number of hours per week worked in the year ending 31 May, 1980 A synoptic profile of the characteristics of the holder derived from these Tables is presented in Table 4

Reference to Tables A and B shows that 48,000 or 22 per cent of the farms were owned by persons aged 65 years or over while, at the other end of the scale, less than 8 per cent belonged to persons under 35 years of age Within the LFA, holders aged 65 or over accounted for almost 24 per cent of all farms compared to 19 per cent in the other areas

Just over 50 per cent of all farms had holders working the equivalent of one annual work unit or more In the LFA the 46 per cent in this category was significantly below the 56 per cent in other areas Over 59,000 holders or 27 per cent of the total reported having another gainful activity outside the farm and they were distributed evenly between the

Table 4 *Farms with Selected Holder Characteristics as a Percentage of All Farms in Type, State and LFA – 1980*

IRISH TYPES	STATE									LFA								
	All holders	Age of holder			AWU Class			Other Activity		All holders	Age of holder			AWU Class			Other Activity	
		<45	45-64	65+	<0.5	0.5-1.0	≥1.0	None	Some		<45	45-64	65+	<0.5	0.5-1.0	≥1.0	None	Some
	%																	
11 Cereals	100	38	47	15	42	20	38	57	43	100	53	29	18	47	17	36	52	48
12 Field crops, other	100	34	49	17	44	18	38	56	44	100	30	48	22	54	22	24	52	48
41 Cattle, dairying	100	29	55	17	12	19	69	87	13	100	28	55	18	14	22	64	84	16
42 Cattle, rearing/ fattening	100	24	52	25	31	28	41	71	29	100	24	50	26	31	30	38	69	31
43 Cattle, mixed	100	21	58	21	21	27	53	76	24	100	21	58	22	22	30	49	73	27
44 Grazing livestock, other	100	20	55	25	28	25	47	74	26	100	20	55	25	27	27	47	75	25
8 Mixed crop - livestock	100	25	53	22	26	23	51	75	25	100	22	47	31	36	31	34	69	31
Other classified	100	26	51	23	31	18	51	70	30	100	25	48	27	29	18	53	70	30
Unclassified	100	22	49	29	62	20	19	44	56	100	21	47	32	59	24	18	49	51
Total	100	25	53	22	26	24	50	73	27	100	24	53	24	27	27	46	73	27

LFA and other areas Although this figure is almost identical to the 58,000 holders who contributed less than 0 5 AWU, it must be stressed that they were not necessarily the same holders in all cases'

Farms specialising in Field Crops (Types 11 and 12) tended to have younger than average holders and, perhaps surprisingly, given that these farms were above average in size, below average labour input from the holder Further analysis shows that this latter feature was due both to the availability of other labour on the farm and to a lower overall labour requirement Farms specialising in dairying (Type 41) also had a relatively lower involve ment by older holders These farms were also the most labour intensive with 69 per cent of the holders contributing a full annual work unit and this is also borne out by the fact that only 13 per cent had another gainful activity These features are also evident, albeit to a lesser extent, in relation to mixed farming including dairying (e g Type 43) The opposite situation is seen in regard to the other specialist grazing livestock enterprises (Types 42 and 44) in so far as they had above average involvement by older farmers and below average labour input by the holder The inactivity on the "unclassified" farms is best illustrated by the fact that over 55 per cent of the holders involved had another gainful activity and that almost 29 per cent were aged 65 or over

Taken overall, it can be seen that the individual Irish Types exhibit different holder profiles which can in most cases be traced back to the nature and location of the enter prises themselves Classification by type of farming is therefore useful in analysing the structure of Irish farming in so far as it relates to the characteristics of the holder

Much attention has been focused on the possible retarding influences of older holders and part time holders on agricultural development An attempt is made to assess these factors in Table 5 by analysing for the State and the LFA the relative performance of farms, measured in terms of the total SGM per hectare of land farmed, for selected categories of holder within Irish Types While it must be accepted that there are many other factors, e g , size of farm, degree of mechanisation, quality of soil, layout of farm, etc , which influence the relative performance of farms, it is nevertheless clear from Table 5 that age and labour input of the holder are significant factors For almost all types of farming and equally for the State and LFA it is clear that older farmers and part time farmers on average achieved poorer results The most notable exceptions occurred in the cases of Type 11 (Cereals) and the residual "other classified" category While the situation in these types is probably worthy of further examination it must be pointed out that the numbers involved were relatively small and, as a result, the estimates may be subject to high sampling errors

Overall, in the State the total SGM per hectare achieved by farmers aged 65 or over was less than 72 per cent of that achieved by farmers under 45 years of age Similarly the performance of farmers contributing less than 0 5 AWU was only 63 per cent of that of farmers contributing a full work unit while farmers with another gainful activity achieved only 72 per cent of the level of those with no outside activity The relationships within the LFA were broadly similar to those for the State

Table 5 *Estimated Performance+ of Farms by Holder Characteristics, Irish Types, State and LFA – 1980*

IRISH TYPES	STATE									LFA								
	All holders	Age of holder			AAU Class			Other Activity		All holders	Age of holder			AAU Class			Other Activity	
		<45	45-64	65+	<0.5	0.5-1.0	≥1.0	None	Some		<45	45-64	65+	<0.5	0.5—1.0	≥1.0	None	Some
	Total SGI (ECU)/ha AAU																	
11 Cereals	320	344	305	298	319	328	317	319	323	235	260	170	269	249	291	189	241	224
12 Field crops, other	411	455	389	366	323	359	452	423	363	162	218	143	118	112	137	210	161	165
41 Cattle, dairying	482	519	473	435	488	438	495	485	449	396	425	393	348	351	363	410	399	373
42 Cattle, rearing/ fattening	164	176	167	141	146	154	176	165	160	145	159	147	126	126	143	157	147	140
43 Cattle, mixed	300	321	302	266	257	256	324	307	263	249	247	256	234	228	226	267	255	229
44 Grazing livestock, other	214	215	223	191	182	188	236	220	192	194	184	206	178	177	175	211	196	187
8 Mixed crop - livestock	331	358	323	303	280	310	349	338	293	253	287	248	216	191	245	294	260	235
Other classified	766	890	783	542	537	460	911	784	666	615	591	619	635	359	303	762	621	588
Total (including Unclassified)	318	360	316	258	228	259	360	334	242	244	266	250	200	175	208	283	256	196

+ Performance is measured as Total SGI (ECU) per ha AAU ;— 1 ECU = IR £0 67

The overall comparisons reflect not alone different levels of activity within type of farming enterprises but also the tendency of older and part time holders to have a relatively greater involvement with those types which have lower overall SGMs per hectare (See Table 4) The latter factor is quite significant since it can be seen from Table 5 that the differences in performance between types of farming are much greater than those between categories of holder Not surprisingly in this type of analysis the intensive farming (i e , pigs, poultry and horticulture) undertaken by the "other classified" farmers resulted in their having the highest average levels of SGM per hectare However the differences between the more extensive farming enterprises, in particular the grazing livestock enterprises, are most interesting! Type 41 farms "Cattle, dairying ' had the highest SGMs per hectare with the overall level on these farms being almost three times that observed on Type 42 ("Cattle, rearing/fattening") farms, which had the lowest

Thus, while there are obvious advantages to be gained from encouraging the transfer of land to younger and more full time holders, it is equally clear that, unless such transfers are accompanied by a change of enterprise and/or significant improvement in the existing results achieved, the gains will fall far short of the full potential Unfortunately, recent developments in the Common Agricultural Policy, relating to the control of excess milk production, have virtually removed the possibility of changing to the most productive enterprise (viz dairying) and thus greater emphasis will need to be placed on improving the performance of other farm enterprises

Crops Grown

In Tables C to G inclusive details are given on the number of farms growing each of the main tillage crops (i e , wheat, barley, oats, potatoes and sugar beet) and also on the areas grown The percentage distributions of farms growing each crop and the areas grown by Irish Type are given in Table 6 for the State

The crops are considered individually in the following paragraphs –

Wheat (Table C)

This crop was grown on only 5,700 farms in 1980 (i e , 2 6 per cent of all farms) and the average area grown was 9 1 ha Only 3 3 per cent of the total area was grown in the LFA Wheat was grown by some farms in each of the Irish Types, however Type 11 farms dominated, accounting for 43 per cent of the total area sown In view of the changeover from spring wheat to winter wheat since 1980 and the significant increase in total area sown it is to be expected that this profile might have changed somewhat

Barley (Table D)

Almost 50,000 farmers grew barley in 1980 and while almost 30 per cent of them were in the LFA they accounted for only 10 per cent of the total area grown The average size of crop grown was 2 4 ha in the LFA and 8 5 ha elsewhere Farms specialising in field crops (Types 11 and 12) accounted for only 16 per cent of the growers and 39 per cent of the area sown The extent to which barley is a secondary enterprise on grazing livestock farms is significant with over 20 per cent of farms in Types 41, 43 and 44 growing the crop

(this percentage increasing to well over 30 per cent outside the LFA) It must be assumed that a large proportion of the crop harvested on these farms is retained on the farm for feeding

Table 6 *Percentage Distributions of Farms Growing and Areas Grown of Each Crop by Irish Type, State – 1980*

IRISH TYPES	WHEAT		BARLEY		OATS		POTATOES		SUGAR BEET	
	Farms	Area	Farms	Area	Farms	Area	Farms	Area	Farms	Area
	%									
11 Cereals	21	43	11	28	2	13	1	1	2	4
12 Field crops, other	11	12	5	11	2	4	5	25	24	40
41 Cattle, dairying	11	5	26	14	20	17	30	19	16	9
42 Cattle, rearing/ fattening	4	2	12	4	19	10	21	12	2	1
43 Cattle, mixed	10	3	12	6	20	13	17	11	9	5
44 Grazing livestock, other	7	2	12	5	22	16	14	11	8	3
8 Mixed crops - livestock	31	29	19	28	12	23	10	17	33	33
Other classified	6	4	4	4	3	4	2	4	7	7
TOTAL	100	100	100	100	100	100	100	100	100	100

Oats (Table E)

Some 30,400 farms grew oats and over 85 per cent of them were in the LFA but, because of the relatively small quantities grown (0 5 ha per farm), they accounted for only 52 per cent of the total area in the State Over 55 per cent of the total area sown was on farms specialising in grazing livestock – most notably Type 44 where 30 per cent of the farms grew the crop

Potatoes (Table F)

Almost 98,000 farms or 44 per cent of the total grew potatoes in 1980 thus, despite the fact that the number of farms growing potatoes had been in decline for a long time, potatoes were still by far the most common crop grown on Irish farms The overall average size of crop was 0 4 ha and this is indicative of the fact that over

95 per cent of growers grew less than 1 ha and accounted for 60 per cent of the total area grown Within the LFA, 67,200 or 50 per cent of all farms grew potatoes and the average area grown was 0 3 ha Most commercial growers are to be found in Types 12 and 8 where 15 per cent of all growers accounted for over 40 per cent of the total area

Sugar Beet (Table G)

Less than 3 5 per cent of all farms were engaged in growing this crop in 1980 and, of these, only 16 per cent were in the LFA The average size of crop was 4 4 ha and over 72 per cent of the total area was grown on farms in Types 12 and 8

As a general comment on the usefulness of the typology in monitoring the growing of crops it might be noted that the farms specialising in field crops (Types 11 and 12) or involved in mixed crops – livestock farming (Type 8) accounted, between them, for 84 per cent of wheat grown, 67 per cent of barley, 40 per cent of oats, 43 per cent of potatoes and 77 per cent of sugar beet Thus, with the exception of oats and potatoes, the above mentioned types clearly identify the most important crop growing farms In addition, as already mentioned, commercial potato producers are mainly to be found in these types and indeed closer analysis would suggest that this is also the case for oats

Livestock

Details of the number of farms with livestock and the related number of animals/birds are given in Tables H to M inclusive Tables are presented for cattle, sheep, pigs and poultry Because of their special importance in Irish farming separate tables are presented for dairy and other cows In Table 7 the percentage distributions of farms with various livestock and the numbers of animals/birds by Irish Type are given for the State

In the following paragraphs the various categories of livestock are examined briefly –

Cattle – (Table H)

Cattle were recorded on 195,900 farms, or 88 per cent of all farms in June 1980 Of the 28,000 farms without cattle, 14,000 were in the "unclassified" category In the State as a whole the average size of herd was 35 1, however the average size in the LFA, at 24 3, was less than half the level in the rest of the country For farms specialising in grazing livestock (i e , General Type 4 farms) the average size of herd varied from 20 4 for farms in Type 44 within the LFA to 64 5 for Type 41 farms outside the LFA General Type 4 farms accounted for around 90 per cent of all cattle

Dairy Cows – (Table I)

Almost 105,000 farms, or 47 per cent of the total, had dairy cows on them in June 1980 The average size of herd was 9 5 in the LFA and 24 7 in other areas and, accordingly, the overall average for the State was 15 4 Farms in Type 41 (Cattle, dairying) accounted for 60 per cent of farms with dairy cows and 83 per cent of the cows A further 26 per cent of the farms with dairy cows were Type 43 farms (Cattle, mixed) and they accounted for a further 11 per cent of the cows

Table 7 *Percentage Distributions of Farms with Livestock and Numbers of Livestock By Irish Type, State – 1980*

IRISH TYPE	CATTLE		DAIRY COWS		OTHER COWS		SHEEP		PIGS		POULTRY	
	Farms	No of Cattle	Farms	No. of Dairy Cows	Farms	No. of Other Cows	Farms	No of Sheep	Farms	No of Pigs	Farms	No of Birds
	%											
11 Cereals	1	1	0	0	1	1	1	1	1	0	1	1
12 Field crops, other	1	1	0	0	1	1	1	2	1	0	2	1
41 Cattle, dairying	32	42	60	83	7	6	13	5	41	9	37	12
42 Cattle, rearing/fattening	33	27	2	0	51	57	17	9	12	1	22	3
43 Cattle, mixed	14	13	26	11	13	9	13	7	13	2	17	4
44 Grazing livestock, other	10	7	6	2	16	15	45	64	9	1	12	3
8 Mixed crops - livestock	7	8	4	3	9	9	9	11	8	3	7	4
Other Classified	2	2	1	1	2	2	2	2	15	83	3	74
Total	100	100	100	100	100	100	100	100	100	100	100	100

Other Cows – (Table J) Around 70 per cent of the 80,000 farms with other cows were in the LFA where the average size of herd was 5 0 compared to 7 9 else where Over 57 per cent of the other cows were on Type 42 (Cattle rearing/fattening) farms and a further 15 per cent were on Type 44 (Grazing livestock, other) farms

Sheep – (Table K) Sheep were recorded on 43,600 farms or less than 20 per cent of farms in the State and almost two thirds of these farms were in the LFA The average size of flock overall was 75 7 with averages of 67 9 and 89 7 for the LFA and other areas respectively Over 64 per cent of the sheep were on Type 44 (Grazing livestock, other) farms and the average size of flock on these farms was 108 8

Pigs – (Table L) Only 12,100 farms or 5 per cent of farms had pigs on them in June 1980 and the degree of commercialisation is further evident from the fact that 15 per cent of these farms, in the "other classified" category, accounted for 83 per cent of total pigs It is interesting to note that a further 9 per cent of pigs were on Type 41 (Cattle, dairying) farms

Poultry – (Table M) Over 87,000 farms kept poultry in 1980, however the dominance of the commercial sector is again evident from the fact that 3 per cent of the farms accounted for 74 per cent of the birds, i e , farms in the "other classified" category

From the foregoing it is clear that, as in the case of crops, the most important farms for each livestock enterprise can be clearly identified by reference to the Irish Types Thus, while Irish farms are concentrated into relatively few of the Principal Types, a very useful pattern of farming analysis can, nevertheless, be obtained by using the Community Typology at this level Further useful information, particularly for grazing livestock enterprises, can be obtained by analysing farms by Particular Type, however it is not proposed to pursue this option in this paper

Contribution to Total SGM

The extent to which the various types of farming contribute to overall agricultural product can be gauged by reference to the extent to which they account for total SGM It should be noted, however, that a complete correspondence is not possible since non specific costs and subsidies are not taken into account in calculating the SGMs In addition the SGMs are not based on 1980 values but are averages over the 1978 1980 period The results presented in Table 8 are nevertheless striking and worthy of comment[1]

The most notable feature of Table 8 is the extent to which Type 41 (Cattle, dairying) farms dominate both in the State as a whole and in the LFA In the State 46 per cent of the total SGM is accounted for by Type 41 farms and this reflects not alone their con tribution to milk output (and the "off farm" output from their subsidiary activities) but also the extent to which they contribute to the output of other farm types by providing young cattle for fattening, etc The other notable feature is the very low contribution of

Type 42 (Cattle, rearing fattening) farms and this is indicative of both the low SGMs applied and the relatively low level of activity on these farms (See Table 5)

Table 8 *Total SGM by Irish Type, State and LFA – 1980*

	IRISH TYPE	STATE		LFA	
		Total SGM (1,000 ESU*)	%	Total SGM (1,000 ESU*)	%
11	Cereals	63.1	4	3.0	1
12	Field crops, other	54.7	3	3.6	1
41	Cattle, dairying	743.2	46	266 4	45
42	Cattle, rearing fattening	213.3	13	110 5	19
43	Cattle, mixed	172.9	11	83.7	14
44	Grazing livestock, other	133 0	8	86 5	15
8	Mixed crops-livestock	148.1	9	19.9	3
	Other classified	85.6	5	22 9	3
	Unclassified	-	-	-	-
	Total	1,613.9	100	596.3	100

*1 ESU = 1,000 ECU , 1 ECU = IR £0.67

It may be calculated from the survey results that almost 90 per cent of the SGM on Type 41 farms is generated by dairy cattle (i e , diary cows plus "followers") The detrimental effect of the milk "super levy" on overall agricultural output is therefore put into sharp perspective! Since it is undoubtedly the case that these farms have also made the most significant contribution to growth in agricultural output in recent years, the need to find a high margin alternative to milk production is, obviously, of vital importance in ensuring future growth Leaving aside the question of finding an alternative as productive as dairying, there remains the question of whether those farmers who may have the capacity to expand further can, in the short term, make an efficient transition to an alternative enterprise given their relatively low involvement with other types of farming Reference to Tables C to M inclusive shows that only barley, potatoes and poultry were found on more than 10 per cent of Type 41 farms In the case of barley just over 20 per cent of the farms were involved and the relatively low average area grown would tend to suggest that a significant proportion of production was retained on the farm for feeding purposes While 47 per cent of the farms had potatoes and over 50 per cent kept poultry it is quite clear that, in both cases, they were engaged in primarily as "kitchen garden" or "farmyard" type enterprises, i e , mainly for the purpose of "own consumption" in the

farm household In addition the very low margins achieved by other cattle enterprises suggests that a significant amount of system development will be necessary before returns, comparable to dairying, can be achieved In all these circumstances therefore the short term prospects for growth in agricultural output generated by Type 41 farms must be viewed with a certain degree of pessimism

Classification by Economic Size

In Table 9 details are presented for the State and the LFA on the number of farms, the area used for agriculture and total standard gross margin classified by economic size class (ESU class)

Table 9 *Number of Farms, Area Used for Agriculture and Total Standard Gross Margin by Economic Size, Class, State and LFA – 1980*

	STATE			LFA		
ESU* CLASS	No of Farms (000)	AAU (000 ha)	SGM (000 ESU)	No of Farms (000)	AAU (000 ha)	SGM (000 ESU)
0	14 0	124 5	0	7 9	71 0	0
≥ 0 - < 2	61 9	504 7	66 8	46 8	443 5	51 4
2 - < 4	42 7	676 2	123 8	31 0	491 4	89 5
4 - < 8	42 8	971 0	245 7	27 4	617 2	155 4
8 - < 16	35 4	1,180 1	401 3	16 0	537 0	175 1
≥ 16	20 7	1,152 0	776 3	5 0	267 8	125 0
Total	223 5	3,608 5	1,619 9	134 1	2,427 8	596 3

*1 ESU (European Size Unit) = 1 000 ECU of SGI , 1 ECU = IR£0 67

Over one-third of all farms had an economic size of less than 2 ESU and these farms contributed only 4 per cent of the total SGM while using almost 14 per cent of the area used for agriculture Not surprisingly, over 70 per cent of these farms were in the LFA where they accounted for over 40 per cent of farms, 21 per cent of AAU and less than 9 per cent of total SGM At the other end of the scale, farms with an economic size of at least 16 ESU accounted for only 12 per cent of all farms The average size, at 57 3 ha, was over two and a half times the overall average size and thus they accounted for 30 per cent of the area used for agriculture Their performance, in terms of SGMs per hectare, was also significantly above average and, as a result, they accounted for over 48 per cent of total SGM Less than one fifth of the farms were in the LFA where they accounted for 4 per cent of farms, 11 per cent of AAU and 21 per cent of total SGM

The dichotomy in Irish farms, from the point of view of the utilisation of the area used for agriculture, can be clearly seen from the data in Table 9 The 62,000 farms with an economic size of 8 ESU or more accounted for around 54 per cent of the AAU but generated almost three quarters of the total SGM Part of this dichotomy in the State is explained by the lower margins pertaining in the LFA, however within this area the significant differences between productive and less productive farms is also much in

evidence with farms with an economic size of 4 ESU or more accounting for over three quarters of the total SGM

In Tables N and O in Annex 1, farms in the State and LFA are cross classified by economic size and type of farming Not surprisingly economic size is closely correlated with type of farming Over 53 per cent of Type 41 farms had an economic size of 8 ESU or more compared to only 8 per cent of Type 42 farms Similarly within the LFA, 66 per cent of Type 41 farms had an economic size of at least 4 ESU compared to 16 per cent of Type 42 farms Only 10 per cent of Type 41 farms had an economic size of less than 2 ESU and over 80 per cent of these farms were in the LFA Over 50 per cent of Type 42 farms were in the lowest size category where they accounted for over 53 per cent of all farms other than the "unclassified" farms

In Tables P and Q, farms where the holder was a natural person, are classified by economic size and characteristics of the holder In view of the conclusions drawn for the data already presented on holders (See Tables A, B, 4 and 5) it is not surprising to see that relatively fewer of the older and part time holders had farms in the higher economic size categories! Only 17 per cent of holders aged 65 or more had farms with an economic size of 8 ESU or more compared to 36 per cent of holders under 45 years of age As might be expected, less than 10 per cent of the holders contributing less than 0 5 AWU operated farms of 8 ESU or more compared to 43 per cent of holders contributing a full annual work unit Almost 56 per cent of the holders with other gainful activity had farms with an economic size of less than 2 ESU, compared with 26 per cent of holders with none

Changes between 1975 and 1980

The main changes in farm type and economic size of farm are summarised in Tables 10 and 11 for the State and LFA In order to provide a measure of the "real" change in economic size between 1975 and 1980 (i e , to take account of the effects of inflation on the SGMs used for the two surveys) the 1980 results have also been evaluated using the 1972 1974 SGMs which were applied to the 1975 survey

As a general comment on the overall trends between 1975 and 1980 it may be noted that the total number of farms fell by 4,500, which represents a rate of decline of less than 0 5 per cent per annum Accordingly, the average size of farm increased only marginally from 22 3 ha to 22 6 ha over the five year period This overall trend was broadly similar in the LFA and other areas

It should be noted in interpreting changes over time in the number of farms by type that they are "net" changes and reflect not alone actual changes in the physical characteristics of individual farms but also in some marginal cases, different rates of change in the values of the SGMs applied to the individual items in the two surveys The effect of this latter factor may be assessed from Table R where a cross classification of the number of farms in 1980 by Irish Type, using the 1972 1974 SGMs and Irish Type using the 1978 1980 SGMs is given

Table 10 *No of Farms and Average Size of Farm (AAU) by Irish Type State and LFA – 1975 and 1980*

IRISH TYPE	STATE				LFA			
	1975		1980		1975		1980	
	No of farms (000)	Average AAU (ha)	No of farms (000)	Average AAU (ha)	No of farms (000)	Average AAU (ha)	No of farms (000)	Average AAU (ha)
11 Cereals	2 8	30 2	5 9	33 8	0 4	17 5	0 6	22 1
12 Field crops, other	3 3	19 7	5 8	22 8	1 0	8 0	2 1	10 6
41 Cattle, dairying	57 1	22 3	62 8	24 6	31 4	17 6	35 0	19 2
42 Cattle, rearing/ fattening	66 4	21 5	65 6	19 8	43 4	17 9	44 6	17 0
43 Cattle, mixed	46 4	21 6	27 3	21 1	31 8	16 9	19 7	17 0
44 Grazing livestock, other	23 6	26 6	22 7	27 3	17 4	24 1	16 8	26 4
8 Mixed crops - livestock	11 6	32 2	14 4	31 0	3 9	15 6	5 3	14 8
Other classified	7 7	19 8	4 9	21 0	3 4	14 6	2 0	16 3
Unclassified	9 1	7 5	14 0	8 9	5 1	7 7	7 9	9 0
Total	228 0	22 3	223 5	22 6	137 9	17 8	154 1	18 1

The almost doubling of the number of farms specialising in field crops, Types 11 and 12, reflects, on the one hand, the 30 per cent increase between 1975 and 1980, in the total area under cereals and, on the other, the increased specialisation of farms growing crops It is also noticeable that the average size of Type 11 and Type 12 farms increased significantly – by 12 per cent and 16 per cent respectively – and thus the association between larger farms and the growing of field crops would appear to be an increasing phenomenon

The largest decrease was recorded in the case of Type 43 farms (Cattle, mixed) which declined by over 40 per cent from 46,400 to 27,300 This fall was due in the main to the accumulated effect of the following factors (i) farms getting out of dairying altogether (ii) farms increasing their relative involvement with dairying and thus being reclassified as Type 41 (Cattle, dairying) farms and (iii) farms, on the margin, being reclassified as Type 41 farms due to the relatively higher SGMs applied to dairy cattle in 1980 compared to 1975 In the absence of a "longitudinal type" analysis it is not possible to determine the "gross" flows associated with (i) and (ii), however reference to Table R reveals that factor (iii) accounted for 6,500 of the fall in Type 43 farms With regard to farms getting out of dairying, further results from the two surveys show that the total number of farms with dairy cows fell by almost 23,000 (18 per cent) between 1975 and 1980 while the

number of animals increased by over 9 per cent, with the result that the average size of herd increased by almost a third from 11 6 to 15 4 This increasing specialisation is consistent with the fact that Type 41 farms increased their share of the total dairy cow herd from 68 per cent in 1975 to 83 per cent in 1980 Reference to the biennial December size of herd analyses would suggest that a further increase in the average size of herd of around 25 per cent has occurred since 1980 and, accordingly, it must be assumed that Type 41 farms now account for 90 per cent or more of the dairy cow herd mainly at the expense of Type 43 farms

There were relatively small decreases in the numbers of Type 42 (Cattle, rearing/ fattening) and Type 44 (Grazing livestock, other) farms and this probably reflects a balance between inward flows (mainly Type 43 farms which have stopped keeping dairy cows) and outward flows It is of interest to note that the average size of Type 42 farms decreased by 8 per cent from 21 5 ha to 19 8 ha While this is explained, to a certain extent, by the increased proportion of these farms in the LFA, it may also indicate that smaller farm units are tending towards this type of farming whereas some of the larger and more full time units are tending away from it

There was an increase of 2,800 (24 per cent) in the number of Type 8 (Mixed crops livestock) farms, however reference to Table R suggests that most of this increase was due to the relatively higher SGMs applied to field crops in 1980 compared to 1975 The relative changes in the SGMs was also a significant factor in explaining the decline in the "Other Classified" farms which fell from 7,700 to 4,900

The number of farms in the "unclassified" category increased by almost 54 per cent In addition the average size of these farms increased by almost 20 per cent from 7 5 ha to 8 9 ha and, as a result, the area used for agriculture increased from 68,100 ha to 124,500 ha – the latter figure representing 2 5 per cent of the total AAU in 1980 It is not clear whether this increase was of a permanent nature of merely reflected a temporary phenomenon which may, for example, have been linked to the prevailing agricultural market situations at the times of the surveys If the former is the case then the situation is obviously worthy of careful monitoring particularly if the 1975 1980 trend is con tinuing!

As can be deduced from Table 11 use of updated SGMs resulted in an inflation of approx imately 70 per cent in the average economic size of farms in 1980 In nominal terms therefore there was an apparent increase in excess of 75 per cent in the average economic size of farm between 1975 and 1980, however when allowance is made for inflation in the SGMs, it is seen that the "real" increase was just over 3 per cent

Comparisons between the economic size structures for the two years, based on the 1972 1974 SGMs, indicate a growing polarisation between large and small farms Farms of less than 2 ESU increased from 44 8 per cent of total farms in 1975 to 47 9 per cent in 1980 and this increase would appear to have been at the expense of farms between 2 and 4 ESU, whose percentage share dropped from 23 4 per cent to 20 4 per cent At the other end of the scale the percentage share of farms of 8 ESU or more increased from

Table 11 *No of Farms by Economic Size Class, State and LFA – 1975 and 1980*

Economic Size Class (ESU*)	STATE			LFA		
	1975	1980		1975	1980	
	('72-'74) SCHs	('72-'74) SCHs	('78-'80) SCHs	('72-'74) SCHs	('72-'74) SCHs	('79-'80) SCHs
	No of Farms (000)					
0	9.1	14.0	14 0	5.1	7.9	7.9
≥0 - <2	93.1	93.0	61.9	71 3	70.5	46 8
2 - <4	53 4	45.6	42 7	36.3	30.7	31.0
4 - <8	41.9	38.3	42.8	19 5	18.6	27.4
8 - <16	22.9	23.7	35 4	4.9	5 5	16 0
≥ 16	7.7	9.0	26.7	0 8	1.0	5.0
Total	228.0	223.5	223.5	157 9	134.1	134.1
(Average Size of Farm (ESU))	(4112)	(4250)	(7220)	(2781)	(2589)	(4443)

* 1 European Size Unit (ESU) is defined as 1,200 ECU of total SGM, 1 ECU = IR £0.67

13 4 per cent to 14 6 per cent and this is matched by a corresponding decrease from 18 4 per cent to 17 1 per cent in the share of farms between 4 and 8 ESU The trends in the LFA were broadly similar to those for the State as a whole

This polarisation is consistent with the main trends observed in relation to type of farming, i e , increased specialisation in the high margin dairying and field crop enterprises coupled with the increase in the number of inactive farms and the maintenance of the overall share of the low margin cattle enterprises The indications are that this general movement has continued since 1980, mainly due to the increased specialisation and expansion in dairying that has been observed

4 CONCLUDING REMARKS

The main objective of this paper was to introduce the Community Farm Typology as a means of analysing the structure of Irish farms Notwithstanding the fact that Irish farms were concentrated into relatively few of the Principal Types, the typology, nevertheless, identifies the most important structural features

Some clear conclusions can be drawn in regard to the priorities for future development in the agricultural sector, notably, the need to find a high margin alternative to dairying and to radically improve the margins and levels of activity on the "other cattle" farms, principally Type 42 farms

The Typology analyses are but one feature of the type of information derivable from the Farm Structures Surveys Very detailed data on the physical structure, utilisation of machinery, management and labour input on the farms were published by EUROSTAT in respect of the 1975 Surveys[5] and a comparable publication is due shortly in respect of the 1980 Surveys The CSO is currently preparing a publication of national results, covering aspects of the surveys undertaken to date and would welcome suggestions from users as to content, etc

Finally it might be noted that the Typology is also used in the presentation and analysis of results from the Community Farm Accountancy Data Network (FADN) In particular a linkage between the FSS and the FADN exists via the Typology wherein the results from the FSS are used as a reference framework for weighting the results from the much smaller FADN samples In Ireland there is active co operation between the CSO and An Foras Taluntais in the matters of sample selection and weighting in order to maximise the advantage from such a link

References

1 Council Regulation (EEC) No 218/78 of 19 December 1977 on the organisation of a survey on the structure of agricultural holdings for 1979/80 – OJ No L35, 4/2/1978

2 Commission Decision 78/463/EEC of 7 April 1978 establishing a Community Typology for Agricultural Holdings – OJ No L148, 5/6/1978

3 Commission Decision 84/260/EEC of 29 February 1984 amending Decision 78/463 establishing a Community Typology for Agricultural Holdings – OJ No L128, 14/5/1984

4 Council Directive (EEC) No 75/272 of 28 April 1975 concerning the Community list of less favoured farming areas within the meaning of Directive No 75/268 (IRELAND)

5 Community Survey on the Structure of Agricultural Holdings 1975 Volumes I to VI – EUROSTAT 1978

TABLE A NO OF FARMS WHERE HOLDER IS A NATURAL PERSON BY AGE OF HOLDER AND IRISH TYPE STATE AND LFA - 1980

	IRISH TYPLS	STATE						LFA					
		Age of Holder					Total	Age of Holder					Tot l
		<35	35-44	45-54	55-64	>65		<35	35-44	45-54	55-64	>65	
		Number of Farms (000)											
11	Cereals	08	14	13	14	09	58	01	02	01	01	01	06
12	Field crops, other	06	13	16	12	10	57	02	04	05	05	05	21
41	Cattle dairying	56	122	168	176	104	627	30	66	91	100	62	349
42	Cattle rearing/fattening	45	113	162	175	161	655	32	77	107	116	115	446
43	Cattle mixed	16	40	77	81	58	273	11	30	55	58	43	197
44	Grazing livestock other	12	34	59	65	56	226	09	25	43	49	42	168
8	Mixed crops - livestock	13	24	36	39	32	143	04	08	11	14	16	53
	Other classified	05	07	12	12	11	48	03	02	04	05	05	19
	Un lassified	09	21	34	34	40	139	05	12	18	19	25	78
	Total	171	389	578	609	480	2227	95	227	335	367	314	1338

TABLE B NO OF FARMS WHERE HOLDER IS A NATURAL PERSON BY AWU* CLASS OF HOLDER OTHER GAINFUL ACTIVITY OF HOLDER AND IRISH TYPE STATE AND LFA - 1980

	IRISH TYPES	STATE						LFA					
		AWU CLASS					With another gainful activity	AWU CLASS					With another gainful activity
		<0 5	0 5-<0 75	075-<1 0	1 0	Total		0 5	0 5-<0 75	0 75-<1 0	1 0	Total	
		Number of Farms (000)											
11	Cereals	2 5	0 5	0 7	2 2	5 8	2 5	0 3	0 0	0 1	0 2	0 6	0 3
12	Field crops other	2 6	0 4	0 7	2 2	5 7	2 5	1 1	0 2	0 3	0 5	2 1	1 0
41	Cattle dairying	7 6	4 5	7 4	43 2	62 7	8 1	4 9	3 1	4 7	22 3	34 9	5 5
42	Cattle rearing/fattening	20 3	8 2	10 3	26 6	65 5	20 9	13 9	5 9	7 7	17 1	44 6	13 9
43	Cattle mixed	5 5	3 1	4 2	14 5	27 3	6 5	4 3	2 6	3 3	9 6	19 7	5 3
44	Grazing livestock other	6 3	2 2	3 4	10 7	22 6	6 0	4 4	1 7	2 8	7 9	16 8	4 2
8	Mixed crops - livestock	3 7	1 4	2 0	7 3	14 3	3 6	1 9	0 7	0 9	1 8	5.3	1 6
	Other classified	1 5	0 3	0 6	2 4	4 8	1 4	0 6	0 1	0 2	1 0	1 9	0 6
	Unclassified	8 5	1 3	1 5	2 6	13 9	7 8	4 6	0 9	1 0	1 4	7 8	4 0
	Total	58 5	21 8	30 7	111 6	222 7	59 3	36 0	15 2	20 8	61 8	133 8	35 3

*[illegible] (AWU) is [illegible] to 2200 h [illegible]

TABLE C NUMBER OF FARMS WITH WHEAT AND AREA UNDER WHEAT BY IRISH TYPE STATE AND LFA - 1980

	IRISH TYPES	STATE				LFA			
		No of farms with Wheat (000)	Percentage of all farms in Type %	Area under Wheat (000 ha)	Average area under Wheat (ha)	No of farms with Wheat (000)	Percentage of all farms in Type %	Area under Wheat (000 ha)	Average area under Wheat (ha)
11	Cereals	12	20 5	22 2	18 4	01	11 3	06	9 6
12	Field crops other	06	10 5	6 5	10 6	00	†	†	†
41	Cattle dairying	07	1 0	2 6	4 0	01	0 4	0 1	1 0
42	Cattle rearing/fattening	02	0.3	0 9	4 7	00	†	†	†
43	Cattle mixed	06	2 0	1 7	3 0	02	0 9	0 1	0 5
44	Grazing livestock other	04	1 7	1 2	3 1	02	1 0	0 1	0 6
8	Mixed crops - livestock	1 8	12 4	15 0	8 4	02	3 0	0 7	4.3
	Other classified	03	6 9	2 2	6 6	00	†	†	†
	Unclassified	-	-	-		-		-	-
	Total	5 7	2 6	52 3	9 1	0 8	0 6	1 7	2 3

TABLE D NUMBER OF FARMS WITH BARLEY AND AREA UNDER BARLEY BY IRISH TYPE STATE AND LFA - 1980

IRISH TYPES	STATE				LFA			
	No of farms with Barley (000)	Percentage of all farms in Type %	Area under Barley (000 ha)	Average area under Barley (ha)	No of farms with Barley (000)	Percentage of all farms in Type %	Area under Barley (000 ha)	Average area under Barley (ha)
11 Cereals	5 6	94 8	94 7	17 0	0 4	77 6	5 5	12 3
12 Field crops other	2 6	45 2	35 8	13 6	0 2	9 8	1 9	9 0
41 Cattle dairying	12 9	20 6	47 5	3 7	3 6	10 4	7 0	1 9
42 Cattle rearing/fattening	5 8	8 8	14 9	2 6	2 3	5 1	3 3	1 4
43 Cattle mixed	5 7	21 0	19 9	3 5	2 1	10 8	2 5	1 2
44 Grazing livestock other	5 8	25 4	16 3	2 8	3 6	21 2	4 6	1 3
8 Mixed crops - livestock	9 6	66 7	92 9	9 6	1 7	31 3	8 6	5 2
Other classified	1 8	36 4	13 6	7 6	0 4	21 1	1 2	2 8
Unclassified	-	-	-	-	-	-	-	-
Total	49 8	22 3	335 7	6 7	14 4	10 7	34 6	2 4

TABLE E NUMBER OF FARMS WITH OATS AND AREA UNDER OATS BY IRISH TYPE STATE AND LFA 1980

	IRISH TYPES	STATE				LFA			
		No of farms with Oats (000)	Percentage of all farms in Type %	Area under Oats (000 ha)	Average area under Oats (ha)	No of farms with Oats (000)	Percentage of all farms in Type %	Area under Oats (000 ha)	Average area under Oats (ha)
11	Cereals	0 6	9 4	3 5	6 2	0 1	21 3	0 5	4 0
12	Field crops other	0 6	10 1	1 1	1 9	0 4	20 5	0 4	0 9
41	Cattle dairying	6 2	9 9	4.5	0 7	4 9	14 1	2.3	0 5
42	Cattle rearing/fattening	5 8	8 8	2 6	0 5	5 5	12 2	2 1	0 4
43	Cattle mixed	6 0	22 1	3.3	0 5	5 5	28 0	2.3	0 4
44	Grazing livestock other	6 8	30 0	4 1	0 6	6 4	38 0	3 2	0 5
8	Mixed crops - livestock	3 6	24 9	5 8	1 6	2 6	49 7	2 4	0 9
	Other classified	0 8	16 6	1 0	1 3	0 6	31 7	0 4	0 7
	Unclassified	-	-	-	-	-	-	-	-
	Total	30 4	13 6	26 0	0 9	26 1	19 5	13 6	0 5

TABLE F NUMBER OF FARMS WITH POTATOES AND AREA UNDER POTATOES BY IRISH TYPE STATE AND LFA 1980

	IRISH TYPES	STATE				LFA			
		No of farms with Potatoes (000)	Percentage of all farms in Type %	Area under Potatoes (000 ha)	Average area under Potatoes (ha)	No of farms with Potatoes (000)	Percentage of all farms in Type %	Area under Potatoes (000 ha)	Average area under Potatoes (ha)
11	Cereals	0 8	13 4	0 5	0 6	0 1	12 0	0 0	0 4
12	Field crops other	4 7	80 0	8 9	1 9	2 0	95 9	1 5	0 8
41	Cattle dairying	29 7	47 3	6 9	0 2	18 9	54 0	3 9	0 2
42	Cattle rearing/fattening	20 5	31 3	4 1	0 2	16 4	36 6	3 1	0 2
43	Cattle mixed	16 6	60 6	3 7	0 2	12 7	64 1	2 6	0 2
44	Grazing livestock other	13 5	59 3	3 9	0 3	1' 2	66 9	3 2	0.3
8	Mixed crops - livestock	9 5	66 0	6 0	0 6	4 8	90 7	3 2	0 7
	Other classified	2 3	47 7	1 4	0 6	1 2	58 1	0 6	0 5
	Unclassified	-	-	-	-	-	-	-	-
	Total	97 6	43 7	35 3	0 4	67 2	50 1	18 2	0 3

TABLE G NUMBER OF FARMS WITH SUGAR BEET AND AREA UNDER SUGAR BEET BY IRISH TYPE STATE AND LFA 1980

	IRISH TYPES	STATE				LFA			
		No of farms with Sugar Beet (000)	Percentage of all farms in Type %	Area under Sugar Beet (000 ha)	Average area under Sugar Beet (ha)	No of farms with Sugar Beet (000)	Percentage of all farms in Type %	Area under Sugar Beet (000 ha)	Average area under Sugar Beet (ha)
11	Cereals	02	27	12	77	-	-	-	-
12	Field crops other	18	303	129	73	00	†	†	†
41	Cattle dairying	12	18	27	24	02	05	03	16
42	Cattle rearing/fattening	02	02	02	12	01	02	01	08
43	Cattle mixed	06	24	15	24	01	06	01	10
44	Grazing livestock other	06	25	09	17	04	23	04	11
8	Mixed crops - livestock	24	166	106	44	03	57	06	19
	Other classified	05	106	23	43	01	29	01	13
	Unclassified	-	-	-	-	-	-	-	-
	Total	74	33	323	44	12	09	17	14

TABLE H NUMBER OF FARMS WITH CATTLE AND NUMBER OF CATTLE BY IRISH TYPE STATE AND LFA 1980

	IRISH TYPES	STATE				LFA			
		No of farms with Cattle (000)	Pe centage of all farms in Type %	Number of Cattle (000)	Average No of Cattle	No of farms with Cattle (000)	Percentage of all farms in Type %	Number of Cattle (000)	Average No of Cattle
11	Cereals	1 7	28 3	42 1	25 3	0 1	17 2	1 6	16 0
12	Field crops other	1 8	31.2	54 8	30 1	0 3	12 4	3 2	12 3
41	Cattle dairying	62 8	100 0	2 872 3	45 7	35 0	100 0	1,079 9	30 8
42	Cattle rearing/fattening	65 6	100 0	1 832.5	27 9	44 6	100 0	954 2	21 4
43	Cattle mixed	27 3	100 0	929 9	34 1	19 7	100 0	485 6	24 6
44	Grazing livestock other	19 6	86 2	497 3	25 4	5 3	91 0	312 1	20 4
8	Mixed crops - livestock	13 9	96 6	520 0	37 3	5 1	95 8	75 0	14 7
	Other classified	3 2	64 1	122 0	38 7	1 4	72 3	38 0	26 3
	Unclassified	-	-	-	-	-	-	-	-
	Total	195 9	87 6	6 870 8	35 1	121 6	90 7	2 949 6	24 3

TABLE I NUMBER OF FARMS WITH DAIRY COWS AND NUMBER OF DAIRY COWS BY IRISH TYPE STATE AND LFA 1980

	IRISH TYPES	STATE				LFA			
		No of farms with Dairy Cows (000)	Percentage of all farms in Type %	Number of Dairy Cows (000)	Average No of Dairy Cows	No of farms with Dairy Cows (000)	Percentage of all farms in Type %	Number of Dairy Cow (000)	Average No of Dairy Cows
11	Cereals	0 2	2 6	0 6	4 0	0 0	†	†	†
12	Field crops other	0 2	4 1	0 9	3 7	0 0	†	†	†
41	Cattle dairying	62 8	100 0	1,335 1	21 3	35 0	100 0	488 8	14 0
42	Cattle rearing/fattening	1 9	2 9	2 3	1 2	1 2	2 7	1 4	1 1
43	Cattle mixed	27 3	100 0	177 4	6 5	19 7	100 0	85 1	4 3
44	Grazing livestock other	6 7	29 6	31 6	4 7	5 7	33 8	19 6	3 5
8	Mixed crops - livestock	4 0	27 6	43 3	10 9	1 4	26 8	6 1	4 3
	Other classified	1 5	29 8	23 8	16 2	0 7	36 1	6 4	8 9
	Unclassified	-	-	-	-	-	-	-	-
	Total	104 6	46 8	1 614 9	15 4	63 8	47 6	607 6	9 5

TABLE J NUMBER OF FARMS WITH OTHER COWS AND NUMBER OF OTHER COWS BY IRISH TYPE STATE AND LFA 1980

	IRISH TYPES	STATE				LFA			
		No of farms with Other Cows (000)	Percentage of all farms in Type %	Number of Other Cows (000)	Average No of Other Cows	No of farms with Other Cows (000)	Percentage of all farms in Type %	Number of Other Cows (000)	Average No of Other Cows
11	Cereals	0 4	7 6	2 2	5 0	0 0	†	†	†
12	Field crops other	0 7	12 5	4 2	5 8	0 1	5 1	0 5	5 0
41	Cattle dairying	5 9	9 5	26 2	4 4	3 2	9 2	12 1	3 7
42	Cattle rearing/fattening	40 9	62 4	266 3	6 5	30 4	68 0	175 1	5 8
43	Cattle mixed	10 2	37 3	43 3	4 2	8 5	43 2	31.3	3 7
44	Grazing livestock other	13 1	57 7	70 3	5 4	10 4	62 1	48 2	4 6
8	Mixed crops - livestock	6 9	47 6	43 8	6 4	3 2	59 3	11 6	3 7
	Other classified	1 5	29 8	8 9	6 1	0 8	41 4	4 1	5 0
	Unclassified	-	-	-	-	-	-	-	-
	Total	79 7	35 6	465 2	5 8	56 7	42 3	283 1	5 0

TABLE K NUMBER OF FARMS WITH SHEEP AND NUMBER OF SHEEP
BY IRISH TYPE STATE AND LFA 1980

	IRISH TYPES	STATE				LFA			
		No of farms with Sheep (000)	Percentage of all farms in Type %	Number of Sheep (000)	Average No of Sheep	No of farms with Sheep (000)	Percentage of all farms in Type %	Number of Sheep (000)	Average No of Sheep
11	Cereals	0 3	4 8	29 2	104 3	0 0	†	†	†
12	Field crops other	0 6	10 1	50 9	86 7	0 0	†	†	†
41	Cattle dairying	5 7	9 0	172 7	30 4	3 1	9 0	81 7	26 0
42	Cattle rearing/fattening	7 3	11 1	286 8	39 3	4 5	10 1	145 9	32 5
43	Cattle mixed	5 8	21 1	217 6	37 7	3 9	19 7	131 1	33 7
44	Grazing livestock other	19 5	85 9	2 124 4	108 8	15 2	90 5	1 488.3	97 8
8	Mixed crops - livestock	3 7	25 9	364 5	97 7	0 9	16 0	36 2	42 5
	Other classified	0 7	14 9	55 2	75 3	0 3	15 8	14 6	46 3
	Unclassified	-	-	-	-	-	-	-	-
	Total	43 6	19 5	3 301 3	75 7	28 0	20 9	1 900 1	67 9

TABLE L NUMBER OF FARMS WITH PIGS AND NUMBER OF PIGS
BY IRISH TYPE STATE AND LFA 1980

	IRISH TYPES	STATE				LFA			
		No of farms with Pigs (000)	Percentage of all farms in Type %	Number of Pigs (000)	Average No of Pigs	No of farms with Pigs (000)	Percentage of all farms in Type %	Number of Pigs (000)	Average No of P gs
11	Cereals	0 1	1 2	0 7	10 2				
12	Field crops other	0 1	2 5	1 4	9 7	0 0	†	†	†
41	Cattle dairying	5 0	7 9	90 9	18 3	2 2	6 4	34 3	15 4
42	Cattle rearing/fattening	1 4	2,2	10 4	7 3	0 7	1 6	3 3	4 6
43	Cattle mixed	1 6	5 9	23 3	14 5	0 8	4 0	11 4	14 6
44	Grazing livestock other	1 1	4 7	9 1	8,5	0 6	3 7	5 0	8 2
8	Mixed crops - livestock	0 9	6 3	33 6	36 8	0 2	2 9	3 1	20 2
	Other classified	1 9	37 9	839 8	450 8	0 6	30 8	309 2	501 6
	Unclassified	-	-	-	-	-	-	-	-
	To al	12 1	5 4	1 009 2	83 6	5 1	3 8	366 5	71 6

TABLE M NUMBER OF FARMS WITH POULTRY AND NUMBER OF POULTRY BY IRISH TYPE STATE AND LFA 1986

	IRISH TYPES	STATE				LFA			
		No of farms with Poultry (000)	Percentage of all farms in Type %	Number of Poultry (000)	Average No of Poultry	No of farms with Poultry (000)	Percentage of all farms in Type %	Number of Poultry (000)	Average No of Poultry
11	Cereals	0 6	10 5	57 1	92 7	0 1	9 4	0 7	12 8
12	Field crops other	1 3	22 8	55 0	41 4	0 5	23 0	6 9	14 4
41	Cattle dairying	32 0	51 0	1 118 2	34 9	18 6	53 1	459 1	24 7
42	Cattle rearing/fattening	19 5	29 7	326 9	16 8	13 5	30 2	202 1	15 0
43	Cattle mixed	14 4	52 8	353 0	24 5	10 2	51 6	200 5	19 7
44	Grazing livestock other	10 6	46 5	241 5	22 9	8 4	50 1	179 2	21 3
8	Mixed crops - livestock	5 9	41 2	337 0	56 7	2 3	44 0	57 5	24 6
	Other classified	2 8	57 6	7 116 2	2 514 8	1 5	73 3	3 992 2	2 724 4
	Unclassified	-	-	-	-	-	-	-	-
	Total	87 2	39 0	9 604 9	110 1	55 1	41 1	5 098 2	92 6

TABLE N NUMBER OF FARMS BY ECONOMIC SIZE CLASS AND IRISH TYPE STATE – 1980

IRISH TYPES	Economic Size Class (ESU*)						Total
	0	>0-<2	2 <4	4 <8	8 <16	≥16	
	Number of Farms (000)						
11 Cereals		1 7	1 0	1 2	1 0	1 2	5 9
12 Field crops other		2 9	0 5	0 6	0 7	1 2	5 8
41 Cattle dairying		6 4	7 8	15 3	17 8	15 5	62 8
42 Cattle rearing/fattening		33 1	17 1	10 0	4 2	1 2	65 6
43 Cattle mixed		6 9	8 0	5 7	4 5	2 2	27 3
44 Grazing livestock other		5 2	5 7	7 1	3 5	1 2	22 7
8 Mixed crops – livestock		4 2	1 9	2 3	3 0	3 0	14 4
Other classified		1 6	0 7	0 6	0 6	1 4	4 9
Unclassified	14 0						14 0
Total	14 0	6' 9	42 7	42 8	35 4	26 7	223 5

*One Europe r S /. U (ESU) is de ined as 1 0' 0 ' CL (to r .(I r ECU – ...

TABLE O NUMBER OF FARMS BY ECONOMIC SIZE CLASS AND IRISH TYPE LESS FAVOURED AREAS - 1980

	IRISH TYPES	Economic Size Class (ESU*)						Total
		0	>0 <2	2 <4	4 <8	8 <16	≥16	
		Number of Farms (000)						
11	Cereals		02	01	01	00	00	06
12	Field crops other		18	01	01	01	01	21
41	Cattle dairying		53	65	108	91	33	350
42	Cattle rearing/fattening		260	116	53	16	02	446
43	Cattle mixed		62	67	41	23	04	197
44	Grazing livestock other		33	48	59	23	04	168
8	Mixed crops - livestock		31	08	07	05	02	53
	Other classified		08	03	03	02	04	20
	Unclassified	79						79
Total		79	468	310	274	160	50	1341

*One European Size Unit (ESU) is defined as 1 000 ECU [illegible] SO 1 ECU = IR £0 67

TABLE P NUMBER OF FARMS WHERE HOLDER IS A NATURAL PERSON BY ECONOMIC SIZE CLASS AND BY AGE AWU* CLASS AND OTHER GAINFUL ACTIVITY OF HOLDER STATE 1980

	Economic Size Class (ESU**)						Total
	0	>0 <2	2 <4	4 <8	8 <16	≥16	
	Number of Farms (000)						
Age of Holder							
<35	0 9	3 5	2 9	3 0	3 4	3 2	17 1
35 - 44	2 1	8 3	7 1	8 0	6 9	6 5	38 9
45 - 54	3 4	13 9	10 7	12 0	10 5	7 3	57 8
55 - 64	3 4	17 3	12 2	12 2	9 7	6 0	60 9
≥65	4 0	18 7	9 6	7 4	4 9	3 4	48 0
AWU Class of Holder							
<0 5	8 5	27 5	10 6	6 5	3 3	2 0	58 5
0 5 - <0 75	1 3	9 1	5 2	3 4	1 8	1 0	21 8
0 75 - <1 0	1 5	9 3	7 7	6 3	3 7	2 2	30 7
1 0	2 6	15 8	19 0	26 4	26 5	21 3	111 6
Other Gainful Activity of Holder							
None	6 2	36 4	30 2	34 8	31 4	24 4	163 4
Some	7 8	25 3	12 4	7 9	3 9	2 1	59 3
Total	13 9	61 7	42 6	42 7	35 4	26 4	222 7

*One annual work unit (AWU) [illegible] eq[illegible] to 2 [illegible]00 hours p[illegible] annum wo[illegible]ed on the farm
**One Europ[illegible]an Size Unit (ESU) is defined as [illegible]00 [illegible] of [illegible]

TABLE Q NUMBER OF FARMS WHERE HOLDER IS A NATURAL PERSON BY ECONOMIC SIZE CLASS AND BY AGE AWU* CLASS AND OTHER GAINFUL ACTIVITY OF HOLDER LFA - 1980

	Economic Size Class (ESU**)						Total
	0	⩾0-⩽2	2-⩽4	4 ⩽8	8-⩽16	⩾16	
	Number of Farms (000)						
Age of Holder							
⩽35	05	26	21	21	16	06	95
35 - 44	12	62	54	53	34	11	227
45 - 54	18	103	77	76	47	14	335
55 - 64	19	130	88	76	42	12	367
⩾65	25	146	69	48	21	06	314
AWU Class of Holder							
⩽ 05	46	188	71	37	14	04	360
05 -⩽075	09	71	37	24	09	02	152
075 -⩽10	10	79	58	40	18	04	208
1 0	14	129	142	173	119	40	618
Other Gainful Activity of Holder							
None	38	295	227	226	143	45	975
Some	40	172	82	47	17	04	363
Total	78	467	309	274	160	49	1338

*One annual work unit (AWU) is equivalent to 2 200 hours per annum worked on the farm

**One European Size Unit (ESU) is defined as 1 000 ECU of total SGM = 1 ESU = 1 000 ECU

TABLE R NUMBER OF FARMS CROSS-CLASSIFIED BY IRISH TYPE USING 1978–1980 SGMs AND BY IRISH TYPE USING 1972–1974 SGMs STATE – 1980

	IRISH TYPE (1972 1974 SGMs)	IRISH TYPE (1978 1980 SGMs)									
		11 Cereals	12 Field crops other	41 Cattle dairying	42 Cattle rearing/ fattening	43 Cattle mixed	44 Grazing livestock other	8 Mixed crops livestock	Other classified	Unclassified	Total
		Number of Farms (000)									
11	Cereals	5 5	0 3					0 0			5 8
12	Field crops other	0 0	4 4						0 0		4 4
41	Cattle dairying			55 8		0 1	0 1	0 1	0 0		56 0
42	Cattle rearing/fattening				65.3	0 9	3 5	2 1	0 2		72 0
43	Cattle mixed			6 5		26 0	0 8	0 2	0 1		33 6
44	Grazing livestock other			0 2	0 2	0 1	18 1	0 8	0 1		19 6
8	Mixed crops – livestock	0 3	0 8	0 1	0 1	0 0	0 1	10 1	0 2		11 7
	Other classified	0 0	0 4	0 2	0 1	0 1	0 2	1 2	4 3	0 2	6 6
	Unclassified									13 9	13 9
	Total	5 9	5 8	62 8	65 6	27 3	22 7	14 4	4 9	14 0	225 5

ANNEX 2 -

STANDARD GROSS MARGINS PER UNIT (BASE PERIOD 1978-1980) APPLIED TO THE 1980 FARM STRUCTURES SURVEY RESULTS

Item	Unit	Munster/Leinster	Connacht/Ulster
		ECU(1)	
Wheat	ha	538	538
Barley*	"	448	342
Oats*	"	381	264
Dried vegetables	"	679	679
Potatoes*	"	1,380	1,227
Sugar beet*	"	908	715
Industrial plants	"	700	700
Fresh vegetables melons and strawberries (open field)	"	1,810	1 810
Fresh vegetables melons and strawberries (market garden)	"	2 634	2 634
Fresh vegetables melons and strawberries (under glass)	"	23 212	23 212
Arable land seeds and seedings	"	764	764
Fruit and berry plantations	"	2,329	2,329
Mushrooms	"	214 130	214 130
Equidae	head	114	114
Bovine animals under one year old	"	93	93
Male bovine animals over one but under two years old	"	101	101
Female bovine animals over one but under two years old		95	95
Male bovine animals two years old and over	"	119	119
Heifers two years old and over	"	109	109
Dairy cows*	"	413	376
Other cows*	"	78	115
Sheep (all ages) (2)*	"	22	28
Piglets(3)	"	11	11
Breeding sows	"	183	183
Other pigs	"	24	24
Broilers	100 birds	57	57
Laying hens	100 birds	117	117
Other poultry	100 birds	95	95

(1) 1 ECU = IR £0.67 (2) When there are only ewes then SGM = 45 (Munster/Leinster) and 56 (Connacht/Ulster) (3) Only applied when there are no breeding sows
* SGM for item different in the two regions
SOURCE Commission Decision 85/250/EEC

ANNEX 3 -

SUMMARY EXPLANATION OF GENERAL (ONE DIGIT) AND PRINCIPAL (TWO DIGIT) TYPES

Type	Description in terms of contribution to total SCM of farm
1 Field crops	Field crops $> \frac{2}{3}$
*11 Cereals	Cereals $> \frac{2}{3}$
*12 Field crops other	Field crops $> \frac{2}{3}$ cereals $\leq \frac{2}{3}$
2 (=21) Horticulture	Horticulture $> \frac{2}{3}$
3 Permanent crops	Permanent crops $> \frac{2}{3}$
31 Vineyards	Vineyards $> \frac{2}{3}$
32 Fruit/permanent crops other	Permanent crops $> \frac{2}{3}$ vineyards $\leq \frac{2}{3}$
4 Grazing livestock	Grazing livestock $> \frac{2}{3}$
*41 Cattle dairying	Dairy Cattle † $> \frac{2}{3}$ dairy cows $> \frac{2}{3}$ dairy cattle
*42 Cattle rearing/fattening	All cattle $> \frac{2}{3}$ dairy cows $\leq \frac{1}{10}$
*43 Cattle mixed	All cattle $> \frac{2}{3}$ dairy cows $> \frac{1}{10}$ (excluding Type 41 farms)
*44 Grazing livestock other	Grazing livestock $> \frac{2}{3}$ cattle $\leq \frac{2}{3}$
5 Pigs and poultry	Pigs and poultry $> \frac{2}{3}$
51 Pigs	Pigs $> \frac{2}{3}$
52 Pigs and poultry other	Pigs and poultry $> \frac{2}{3}$ pigs $\leq \frac{2}{3}$
6 Mixed cropping	$\frac{1}{3} <$ field crops $\leq \frac{2}{3}$ *or* $\frac{1}{3} <$ horticulture $\leq \frac{2}{3}$ *or* $\frac{1}{3} <$ permanent crops $\leq \frac{2}{3}$ grazing livestock $\leq \frac{1}{3}$ pigs and poultry $\leq \frac{1}{3}$
61 Horticulture and permanent crops	Horticulture $> \frac{1}{3}$ permanent crops $> \frac{1}{3}$
62 Mixed cropping other	Type 6 excluding Type 61
7 Mixed livestock	$\frac{1}{3} <$ grazing livestock $\leq \frac{2}{3}$ *or* $\frac{1}{3} <$ pigs and poultry $\leq \frac{2}{3}$ field crops $\leq \frac{1}{3}$ horticulture $\leq \frac{1}{3}$ permanent crops $\leq \frac{1}{3}$
71 Partially dominant grazing livestock	$\frac{1}{3} <$ Grazing livestock $\leq \frac{2}{3}$ no other activity $> \frac{1}{3}$
72 Mixed livestock other	$\frac{1}{3} <$ Pigs and poultry $\leq \frac{2}{3}$ field crops $\leq \frac{1}{3}$ horticulture $\leq \frac{1}{3}$ permanent crops $\leq \frac{1}{3}$
*8 Crops - livestock	Other farms with crops and livestock
81 Field crops and grazing livestock	Field crops $> \frac{1}{3}$ grazing livestock $> \frac{1}{3}$
82 Crops - livestock other	Type 8 excluding Type 81

*Denotes Irish Type

†Dairy cattle = dairy cows *plus* cattle under one year *plus* female cattle over one year

SOURCE Commission Decision 78/46 /EEC

R O'Connor It gives me great pleasure to propose the vote of thanks of the Society to the authors Messrs O'Hanlon and Treacy The paper is in the usual CSO tradition of contributions to the Society It is factual, comprehensive and well put together – perhaps too comprehensive for a single reading It is difficult for a person seeing the text for the first time to grasp anything but a fraction of the vast amount of facts presented I am not complaining about this, however The paper is a valuable source of information for research workers and will be used widely over the coming years

In the short time at my disposal tonight, I will concentrate on just a few points which I hope will be of some interest to the audience, particularly to those who are not too familiar with the problems of collecting the agricultural statistics I begin with the much misunderstood definition of holdings and farms As the authors say early on in their contribution, the traditional system of land enumeration in Ireland is based on an owner ship rather than on a farmed basis Rented land is not included with a holders own land It is given as a separate holding or holdings Because of this, people tend to think that an agricultural holding is a piece of land with a seperate rateable valuation and that one farmer could have a number of such holdings This is not so At the agricultural censuses – which in the past were held at 5 year intervals – the CSO puts together all the separate pieces owned by each landholder and treats all these combined pieces as single holdings In my time in the CSO this putting together of separate pieces was done by the County Councils through the rate collectors Before land was derated it was the rate collector's job to know how much land each landholder in his area had If a farmer had small pieces of land in different townlands or DEDs, the rate collector put all these pieces together and collected the rates on them from the owner No piece was omitted The County Councils, thus, had lists of all landholders in the State and the areas and valuations of their lands These lists were made available to the CSO when required The rate collectors were therefore a great help in the agricultural enumerations What will happen in the future now that rates are abolished is another question In the UK where land has been derated for many years and were there are postal surveys, very serious problems arise from time to time in regard to land ownership and farm sizes Enumerators have then to be employed to go out and sort things out

The changing of the definition from *holding* to *farm* means putting together the area owned and that rented so as to have a figure for the total number of units in the State which are worked as seperate farms The paper shows that when this adjustment was made for 1980 the number of traditional holdings in that year was reduced from 263,000 to 223,500 farms I am sure that many people outside the Statistics Office will ask why this adjustment was not always done particularly so since this definition of a farm has always been used in the Census of Population The answer to this question is not so obvious The Census of Population is designed specifically to count the number of people in the country It is not concerned, except peripherally, with measuring the land area and when the areas of all the farms in the Census of Population are totalled they may not add up to the actual area of land on farms in the State Land belonging to people who are out of the country on the Census might be omitted as well as land belonging to companies and institutions

In the Census of Agriculture on the other hand, one of the primary objectives is to enumerate the total land area of the State and nothing must be allowed to interfere with this Hence the area of every DED in the State must be accounted for If you stick with the definition of land owned you can, with a small amount of adjustment for divided holdings (holdings in more than one DED), get the DED areas correct If, however, you start adding in rented land you will find that a lot of this land is not in the DED where the owned land is situated and the adjustment becomes very difficult and expensive Indeed, in the pre EEC days we just could not afford the cost of such an adjustment Now that we are in the EEC, however, more resources are available and this type of adjustment is possible, but you will notice that even with EEC funds it has to be done on a sample basis It still cannot be done on every farm so that the traditional holding definition will have to remain if all the land is to be accounted for

My second point relates to the classification of farms on the basis of standard gross margins On first reading it would appear that the application of such figures to the enterprises on every farm is a very hazardous operation and indeed it would be if the results were to be used to place farmers in some absolute income category However, the authors are at pains to point out that the object of the exercise is not for this purpose They state that "the purpose of the SGMs is to allow comparison to be made in relative terms between different enterprises within a farm and between farms in respect of overall economic size" The gross margins are also very useful for type of farming classification as the following example shows

In the first year of the 1955 58 National Farm Survey the CSO classified the farms into different categories on the basis of the gross outputs achieved from the different enter prises This worked very well in the first year but in the second year it ran into trouble Cattle prices declined substantially between 1955/56 and 1956/57 and as a result some farms which, on the basis of gross output, were classed as cattle farms the first year were classified as dairy farms in the second year even though there was no change in the number and type of animals kept on these farms in both years The upshot was that the results for both years had to be reclassified using physical units of the different enter prises This was a difficult and not very satisfying operation If average prices for the three years prior to 1956 had been used for all of the survey years it would have saved a lot of trouble and given as good results In other words, a Laspeyres volume index with constant price weights could have been used for the classification as is done in this study

It should oe pointed out, however, that this system is not foolproof either If you look at Appendix Table R you will notice what happens when the weights are changed, as they must be from time to time with changing prices Looking across column 43 we notice that in 1980, 33,600 farms were classed as "cattle, mixed" when the weights used were 1972/74 SGMs whereas when we look down column 43 we notice that only 27,300 farms fell into this class when the valuation was at 1978/80 SGMs The difference is proportion ally not so great for any of the other types but there are fairly substantial absolute differ ences for "cattle, dairying" (41) and "cattle rearing/fattening" (42) By comparing the main diagonal entries in this table with the corresponding row and column totals, readers can see at a glance the effect of using different weighting systems The diagonal entries

show the number of farms whose classifications do not alter even when different SGM weights are used

The economic size classification using the sum of the SGMs for all enterprises is a useful measure of size but it will take us a while to get used to the ESUs and to relate then in some way to income in IR£ Though the authors exhort us not to do this I'm afraid we will always tend to do it nevertheless In the USA and Canada they classify their farms by size on the basis of dolla' incomes, i e , farms with incomes of $2,000 or less, $2,000–$5,000 and so on This is an easily understood classification but I have often wondered as to its accuracy in the context of a national enumeration at one point in time An economic size classification based on average SGMs is a less definite and thus probably a better classification than this However, it should be noted that regardless of economic size one must never abandon the traditional acreage classification In the final analysis the area of a farm is the amount of space at a farmer's disposal and this in turn will always influence his farming decisions

Characteristics of the Holder

In many ways this is the most interesting section of the paper Here the farms are classified by age of holder, hours devoted to farm work and whether or not the holder had another gainful activity It is rather disturbing to note that almost half of the holders are 55 years of age and over and that 22 per cent are over 65 years of age It is hard to see how we can have much progress in farming with such a high proportion of older people in charge of farms The SGM per ha on farms owned by the 65 year olds was 20 per cent below average The classifications on the basis of time devoted to farm work and whether or not the holder had another occupation are also of great interest The traditional classification based on main occupation was, and is, a very rough measure of numbers employed in agriculture It showed the overall trend in farm employment from year to year but it gave no idea of time worked or whether or not the holder was a part time or whole time farmer This paper shows that in 1980, 50 per cent of farms used less than one work unit and that 27 per cent of farm holders had another activity

Though the authors show that farmers with another fainful activity achieved only 72 per cent of the SGM level of those with no outside activity it should not be inferred from this that part time farming is a bad thing Unfortunately the authors do not classify the part timers on the basis of farm area (AAU) but if they did I would expect to see a high pro portion on relatively small farms which even if well worked would supply a rather meagre income Hence the off farm work in most cases provides very useful supplementary income Indeed throughout Europe part time farming is very common and is looked upon as an important means of maintaining people in rural areas

Structural Changes

The third point I would like to refer to is the changes which have been taking place in the structure of Irish agriculture over the years Eric Embleton's paper read to this society on 8 December 1977 showed dramatic changes in the structure of Irish agriculture between 1960 and 1975 Between these years the number of holdings with cows declined from 232,000 to 194,000 while the average herd size increased from 5 5 to 11 1 Over the same period holdings with pigs declined from 111,000 to 27,000 while average herd

size increased from 8 1 to 29 2 Holdings with wheat declined from 51,000 in 1960 to 9,000 in 1975, while the average area under wheat on these holdings rose from 2 9 to 4 9 ha

Unfortunately this paper gives very few comparisons with 1975 but the authors very kindly supplied me with figures from the 1975 Structural Survey which show that the trends towards specialisation have continued since 1975 In 1975 almost 92 per cent of the farms in the State had cattle, but by 1980 the proportion having cattle was down to 87 8 per cent, due mainly to an increase in the number of farms having neither livestock nor cash crops, from 9,000 to 14,000 The number of farms with dairy cows is also declining In 1975, 127,500 farms had such cows with an average herd size of 11 6 cows In 1980, 104,600 farms had dairy cows with an average herd size of 15 4 cows However, between these years the number of dairy farms in the State increased In 1975 some 57,000 farms were so classed with an average number of cows on these farms of 17 6 In 1980 the number of dairy farms had increased to 62,800 while the average herd size had risen to 21 3

The number of pig producers continues to decline at a rapid rate In 1975, 26,500 farms had pigs with an average herd size of 33 3 By 1980, however, the number of farms having pigs was down to 12,100 and the average herd size had increased to 83 6 A more striking figure however is one not given in this paper In December 1979, 68 per cent of all pigs in the State were on 300 holdings with 1 000 or more pigs on each

Another interesting figure is that in 1980 farms with an economic size of 16 ESU (IR£11,000) accounted for only 12 per cent of all farms but they contributed over 48 per cent of the total SGM At the other end of the scale one third of all farms had an economic size of less than 2 ESU (IR£1,300) and accounted for 14 per cent of the area used for agriculture The average SGM per farm at 1978 80 prices was 7,220 ECU (IR£4,800)

In their concluding remarks the authors stress the need to fund a high margin alternative to dairying I'm afraid it will be difficult to find such an enterprise The GM per ha on dairy farms at 482 ECUs is much higher than that on any of the other grass based farm types Most of the tillage crops give higher GMs per acre than dairying but we have to be sceptical about an expansion of tillage in our climate Hence even though the cattle GM at 164 ECUs per ha is very low by any standards, it seems that in the ultimate analysis there is little option except to increase cattle output

If this is to come about cattle profitability must be improved through calf to beef systems, improved winter feed productions, and a change over to continental beef cows which calve easily Also after many years of research there is now good hope that we are on the verge of a breakthrough in the breeding of twin calves If recent research results in Belclare can be successfully transferred to ordinary farms, incomes from dry cattle could be substantially increased We look forward to this development

There is, however, one other important area which needs examination, that is the breeding and rearing of hunter horses There is a world wide and continuing demand for

riding horses of all kinds, small and large, and I think that we should be supplying a good deal of this demand Economic research at the farm level on the breeding and rearing of horses is urgently needed in order to see if it is a viable proposition At the moment most of the available State money is going into the big racing business It is high time that more of this money was spread around on the small racing and hunter breeders I believe that if the breeding of hunters was found profitable at the farm level we could in a short time become a great horse breeding country with exports going all over the world

Finally, I would like to thank the authors for making these very important results available through the Society

Mr J Heavey I am delighted to have the opportunity to second the vote of thanks to the authors and in doing so pay a tribute to colleagues who maintain the highest professional standard in their every day work without getting the public recognition they deserve That is why an occasion of this sort is so important and I am very happy to be partici pating in it

The paper read to us tonight contains a wealth of data and it will take quite a lot of time to digest and assimilate a high proportion of it I will therefore only touch on some of the issues which were of interest to me I am perhaps fortunate in that the nuts and bolts of the Typology are familiar to me, having been involved in its evolution Indeed I would claim to have an odd sort of relationship with its coming into existence in that I played a part in its gestation and birth but I am not the father

As the authors have explained, the Typology is designed to handle the problems of class ifying the enormous diversity of agriculture in the Community and must therefore embrace the range of products and the farm structure of the Mediterranean regions as well as the temperate areas of North Western Europe It is a tall order, and if at times the instrument hits some jarring notes and makes some strange sounds, it will evolve and improve the more playing it gets It is, too subject to adaptation for more local uses, and we must compliment the authors on doing just that from an early stage in their paper and in presenting the data for "Irish types" of farming they have made the results much more meaningful for us than would be available from Community sources

Obviously with a predominantly pastoral agriculture, where cereals and horticulture play much more minor roles, it was necessary to devise an Irish solution for an Irish problem and the authors have been very successful in that (and without the controversy that has accompanied other efforts under that heading!)

One other point on the Typology before making some comments on the paper itself The concept of a Standard Gross Margin as the determining factor for classifying farms by system and by size was agreed upon only after very lengthy discussions Gross output was rejected as a basis for coefficients to enable crops and livestock to be summed together, largely because some products generate extremely high levels of output but from a very high volume of inputs It was felt that a margin of some kind would take care of that

Measuring size by surface area was impractical when one considers the differences in land quality and in the intensity of production under alternative uses across the Community Since the Typology is "designed to meet in particular the information needs of the Common Agricultural Policy ' it was always likely that standard income per unit or a proxy for income would be the basis of the coefficients Such a mechanism based on economic criteria also has its weaknesses The authors did not go into that aspect of the Typology becomes institutionalised within the Community This is important for all of us feel that at some future date these issues should get a good teasing out before the Typology becomes institutionalised within the Community This is important forall of us who use data on agricultural holdings, not only data of Irish origin, but also when we want to make comparisons between the various Member States of the Community

Taking the Typology then as it has been laid down in official Commission documents, there is a wealth of interesting material set out in the paper The data in Table 5 presents us with some good examples of this I note that for the State as a whole Total SGM per hectare was 40 per cent higher where the farmers were under 45 years than for the over 65s, and in the LFA the difference was 33 per cent On Type 41 (dairy) farms, the gap was 19 per cent in favour of the under 45s and on Type 42 (cattle, rearing/fattening) it was 25 per cent This kind of information is bound to fuel the argument about farm retirement schemes To take it a stage further, the data would indicate that only an externally funded scheme, i e , external to the groups involved, would have any impact If we translate the data into IR£s per acre, they show that the average difference on Type 41 farms was about IR£22 in favour of the under 45s Not a great deal of money to be going with into the land use market, and in any event expansion in dairying is not an option now So let us turn to Type 42 and here the average SGM per acre is only about IR£9 50 higher in the under 45 age group then in the over 65 group, both for the State as a whole and in the LFA This level of difference would never bring about the transfer of use of land resources if the leassees had to "buy" the lessors out of their own margins This small difference can also help to explain the lack of mobility in land use between these groups in the Type 41 system in the past, and we should not expect it to be much different in the future The average figures I quoted will of course have a considerable variation about them, so that it will only be at the margins that the under 45s could have any success in funding leasing/retirement schemes Hence the need for external funding if it is felt that such schemes are desirable

The data analysed by AWU class and by "other activity" are also very revealing For the State, the Total SGM per hectare was 48 per cent higher on the above 1 0 AWU class than on the below 1 0 class combined When compared on the basis of "other activity" the difference was 38 per cent Similar orders of magnitude appear for the LFA The differences do not always show up when the data on similar farming systems are tested but the argument for and against part time farming with regard to land use is bound to pick up momentum on the basis of Table 5

In any Typology systems there are bound to be definitional problems and misunder standings arising from terminology A good example of this arises out of the figures for dairy cows in Table 1 There were 105,000 farms with dairy cows giving an average herd size of 15 4 There is a danger that "farms with dairy cows" and "dairy herds" might be

taken to be synonymous Department of Agriculture figures for 1980 on the number of creamery suppliers indicate that the peak number would have been about 67,500 with 1 261 million cows and an average herd size of 18 7 It is estimated that other farms selling milk, whether wholesale or retail would have numbered about 6,000, with an average herd size between 35 and 40 This would put the national average size of dairy herd on farms which produced milk for sale at over 20 cows in 1980

There is a clear need to modernise our terminology in areas such as this, i e , we may have to re define what a dairy herd is for national purposes Indeed, I would widen the debate on this matter to take in all Member States in the Community I remember at a meeting of the EEC Committee for the Farm Accounts Data Network having difficulty interpreting calculations made for milk sold per cow from the different countries in the Community and it emerged, for example, that in Greece a dairy cow was defined as a cow of a dairy breed The result was that the milk produced and sold from cows of any non dairy breed was included in the numerator but the cows were not included in the denominator when calculating milk sold per dairy cow

I would like to make a few further comments on the Typology itself in so far as they have a bearing on the interpretation of the results, i e , there are aspects of the Typology itself which influence the way the figures come out The SGMs used for the LFA were those for Connacht/Ulster while those for the non LFA were those calculated for Leinster/ Munster This means that the region from which the LFA SGMs were calculated exclude Longford, Clare, Kerry and West Cork Even though the SGMs for the two regions of the State differ for only a few items, as set out in Annex II, it is possible that had the SGMs for the LFA had their origins in that region only, they might have been lower – I would not want to make it any stronger than that In that event, the data in, e g , Table 9 and in Table 5 could understate the dichotomy in Irish farming as between the two regions

Secondly, we must constantly remind ourselves that in any Typology, types of farming are defined in a particular way and this may not necessarily be the way each of us as individuals would define them and would picture them in our minds The EEC Typology is based on a financial concept, e g , what percentage of total farm SGM comes from dairy cattle The financial relativity in the SGMs for cows and dry cattle is approximately 4 to 1 Because of this a farm with, for example, one third of its grazing livestock units as dairy cows would give two thirds of its total SGM from dairying and be classified as Type 41 If dairy herd replacements are taken into account, which they are since they are included in dairy cattle, a farm with less than one third of its land under dairy cows could be classified as Type 41 in the EEC Typology The relationship between the EEC Typology farm systems and land usage is therefore very tenuous Remember then, when interpreting results based on the EEC Typology, that a farm of any given type or system is what that Typology says it is and not necessarily as our conventions might have led us to perceive it

The last point on the Typology concerns the interpretation of changes which occur between two Survey periods Again since the Typology is based on a financial concept, some of the apparent changes may be due to changes which occurred in the relative SGMs of the items as set out in Annex II The authors rightly warn us about this in the section dealing with changes between 1975 and 1980 For example, in Table 10, the number of farms in Types 11 and 12 combined (specialised field crops) increased from 6,100 in 1975 to 11,700 in 1980 About 1,500 of this change was due solely to the change in relativities in the SGMs for the two periods as has been shown in Table R Something similar occurs in the results discussed and accordingly the change in the share of the total dairy herd found on Type 41 farms may be overstated by the Typology

Of course, there are many more items of interest to all of us than I have outlined That is the attraction of the paper – it is brimful of data and observations on the way Irish farming has been evolving, as measured by a new methodology The great value of the paper, as I see it, is that it accomplishes what it set out to do, i e , "to introduce the Community Farm Typology as a means of analysing the structure of Irish farms" It confronts us with a new concept for classifying farms in Farm Structure Survey data and in Farm Management Survey data – a concept and a methodology which is to be the basic formula for future analyses We are thus being prepared for the way things to come and our congratulations are due to the authors for succeeding so excellently in that task

We would, of course, all like some more We would all like to pursue our individual interests and analyses further We must, however, appreciate that with Farm Structure Surveys being proposed at four per decade, the volume of processing, validation and analysis is huge Indeed the pile up being caused by work on the 1983 FSS must put a limit on the amount of further analysis the CSO can do on the 1975 and 1980 data And that is a pity, but true I wonder, therefore, if some way could be worked out to allow interested institutions some kind of restricted access at some stage in the data analysis without breaching of confidentiality Maybe not, indeed probably not, because we all appreciate how the CSO must guard the data entrusted to it, but even if some limited access formula could be worked out it would be a boon to analysts and researchers throughout the country

I am delighted to formally second the vote of thanks to our colleagues for a thoroughly enjoyable paper

Rev J Brady I wish to raise some of the wider implications for policy of the trends analysed by the authors in their interesting paper A steady trend towards larger farm sizes over a long number of years leads to a situation in which a significant part of the agricultural land in this country is in holdings quite large enough to provide a very adequate living for their occupants without the addition of numerous State subsidies Price levels in the EEC are guaranteed at a high level, involving enormous outlay by the Community It would be quite reasonable to take the view that this is enough subsidy, and that farmers should farm at whatever level of activity they find profitable with these price levels We do not need to supplement the EEC subsidies with a range of Irish

Government subsidies, which basically involves putting pound notes on the heads of beasts Such schemes are an invitation to fraud and deception Furthermore, much of the money goes to farmers whose income is already ample enough It would be better to abolish this type of subsidy and replace it by an income supplement which is concentrated on the needs of small farmers

It has been suggested that Irish farmers need to look for new cash crops It is surprising that almost no effort is made in Ireland to encourage farmers to grow short rotation timber as a fuel source, either as biomass or as logs, despite the fact that we have much land for which timber is the best crop In Britain timber production is a well established aspect of farm management, and there is a tax regime which makes it attractive as a crop We should have a similar tax regime in Ireland, and encourage the use of our low grade land for energy crops