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Situation and Outlook in Agriculture 2004/05

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SITUATION AND OUTLOOK – FARMERS PLANS FOR 2005

L. Connolly, M. Cushion and B. Moran

TRENDS IN FARM INCOME

The CSO publish an annual account of output, costs and income arising from the agricultural sector. The trend in aggregate income for the agricultural sector is shown in Table 1.1 for the period 1995 to 2003 in current and real terms (base 1995 = 100).

Table 1.1: Aggregate income in Agriculture 1995 - 2003

	Agriculture Income current €m	Agriculture Income Real €1995 = 100
1995	2,438	2,438
1996	2,486	2,443
1997	2,297	2,226
1998	2,293	2,171
1999	2,016	1,876
2000	2,235	1,971
2001	2,274	1,912
2002	2,120	1,704
2003	2,175	1,689

Source: CSO

The data shows that income arising in agriculture has declined by 11% in current terms but by 31% in real terms when inflation is taken into account.

Farmers plans for 2005

Teagasc carry out an annual survey every autumn to ascertain farmers planning intentions for the coming year. The survey is conducted on farmers participating in the National Farm Survey by means of a single visit questionnaire. In 2004 the survey was carried out on a total of 1040 farms. The main objectives of the survey are to ascertain farmers planning intentions in relation to farm investment in the short term and also their views and possible reactions to farm policy changes. The main policy issue in the autumn of 2004 was decoupling of direct payments and farmers were asked for their future plans following decoupling. It should be pointed out that whilst farmers gave their opinions and likely responses there is still a great deal of uncertainty, as key issues such as supply, prices etc will take considerable time to return to stability.

The survey was conducted from mid-September to end-of-November and farmers in the survey were queried on their knowledge and likely responses to the Reform of the CAP and outcome of the Luxembourg Agreement.

Farmers were asked for their short to medium-term plans in relation to breeding stock numbers and tillage crops. It should be emphasised at the outset that the general

feedback from recorders asking the questions is that farmers are still not clear as to how they will react to decoupling in the medium to long term. Many farmers response was that they will wait and see how prices, costs etc. develop in the short term before making long term decisions in relation to their farm business. However, when pressed for a response by recorders, as to how they might react in 2005 and 2007, they answered as shown in Table 1.2.

Table 1.2: Farmers plans for breeding stock numbers in 2005 and 2007 compared to 2004 numbers

	2004/05	2004/07
	% Change in numbers	
Dairy cows	0	+5
Suckler cows	-3	-2
Breeding ewes	-5	-6
Cereals	-7	-12
Root crops	0	-8
Forestry	+11	+30

Data in Table 1.2 show changes planned for all systems of farming but considerable variation exists between systems. Farmers in the mainly dairying system plan on expanding dairy cow numbers, whilst dairy cows on cattle farms are planned to remain static, whilst tillage farmers and sheep farmers plan on reducing dairy cow numbers. However, the overall result for all farms is static for 2005 and a 5% increase in 2007 over the 2004 dairy cow numbers.

Farmers stated that they would reduce suckler cow numbers by 3% and 2% in 2005 and 2007 respectively calculated on their 2004 cow numbers. A large reduction in suckler cows is planned on dairy and cattle farms with increases planned on mainly sheep and mainly tillage farms.

A reduction of 5% and 6% was indicated for ewe numbers for 2005 and 2007 respectively, with declines in all farm systems except on the mainly tillage farms.

Area devoted to cereal crops is planned to decline by 7% in 2005 and 12% in 2007 over the 2004 base figure with the major decline taking place on mainly tillage farms and mainly dairy farms. Farmers in the mainly cattle system plan on increasing cereal area on their farm by 2007. The decline of 8% in root crops by 2007 is due mainly to farmers in the mainly tillage system.

Finally there was a major increase in forestry area to be planted in 2005 and 2007 over 2004. Farmers plan on increasing their 2007 forestry plantations area 30% on the area under forestry in 2004, with the main increase taking place on drystock farms.

When the survey commenced farmers had not been advised on their Single Farm Payment (SFP). In this survey they were queried on their knowledge of their entitlements. Approximately 80% stated that they knew their entitlements and these are shown in Table 1.3 with the percentage of this payment based on rented land.

Table 1.3: Single Farm Payment (SFP) by farm system (€/farm and €/ha)

	Dairying	Dairying & cattle	Cattle rearing	Cattle other	Sheep	Tillage	All
€/farm	6,228	12,934	6,916	10,953	9,518	19,230	9,744
€/ha	145	246	255	356	220	363	259

The average SFP for all farms was €9,744 per farm based on 88% owned land and 12% rented. Tillage farms as expected had the highest SFP per farm mainly due to size of farm.

It is likely that farmers will reduce inputs following decoupling and the response to this question is shown in Table 1.4.

Table 1.4: Plans for purchased inputs post decoupling

	Dairying	Cattle	Sheep	Tillage	All
	%				
No change	63	59	60	55	60
Increase	6	3	3	0	4
Decrease	26	29	33	39	30
Don't know	5	8	4	7	6

Overall 60% of farmers stated that they will not change levels of inputs post decoupling whilst 30% will reduce inputs and 6% are uncertain. Biggest decline in inputs planned in the tillage sector. Average percentage reduction ranged from 30% on sheep farms to 19% on dairy farms with cattle and tillage farms at 26%.

Farmers were also asked for their views on how the new CAP proposals would impact on their farm incomes in the long term and results are shown in Table 1.5.

Table 1.5: Farmers' views on the Impact of the Luxembourg Agreement on farm incomes by 2010

	Dairying	Cattle	Sheep	Tillage	All
	%				
No change	38	41	50	21	40
Increase	13	11	12	9	12
Decrease	30	21	18	39	24
Don't know	19	27	20	31	24

Entitlements to the Single Farm Payment once established can be purchased or sold. Farmers were asked for their plans in relation to using and trading their entitlements within the next 5 years and results are shown in Table 1.6.

Table 1.6: Plans on using/trading entitlements within next 5 years

	Dairying	Cattle	Sheep	Tillage	All
	%				
Will use	96	94	96	98	96
Will sell	1	1	0	2	1
Will purchase	5	2	3	5	4
Will lease-in	2	2	0	3	2

The data show that virtually all (96%) farmers plan on applying for and drawing down their Single Farm Payment over the next 5 years.

Dairying

Farmers not already involved in dairying were asked if they would consider changing to dairy farming post decoupling. No farmer was interested in changing to dairying with 100% stating no interest in developing a dairy enterprise.

Existing dairy farmers were asked if they planned on selling their dairy quota post decoupling and results are shown in Table 1.7.

Table 1.7: Planning to sell milk quota post decoupling by system of farming

System	Dairy	Cattle	Sheep	All
Will sell	8	27	19	8
Don't know	4	0	0	4

Of the farmers who said they will sell 50% plan on selling quota in 2005, a further 19% in 2006 followed by 13% in 2007. The predominant reason given for selling milk quota was low profitability of milk relative to quota value (32%), followed by on farm investment requirement (14%) and absence of a successor (12%).

Legal partnerships are being advocated to help solve labour shortage on farms and farmers were asked if they would be interested in forming such partnerships (Table 1.8).

Table 1.8: Interested in forming legal partnership by farm system

	Dairying	Cattle	Sheep	Tillage	All
	%				
Yes – Family	13	4	3	16	7
Yes – Non family	7	2	0	5	3

Ninety-seven percent of farmers were not interested in non-family partnerships. Finally REPS III has been launched and all farmers were asked if they will join (Table 1.9).

Table 1.9: Will you join REPS III by farming system?

	Dairying	Cattle	Sheep	Tillage	All
	%				
Yes	44	57	77	51	57

Fifty-seven percent stated that they will join REPS III.

Investment plans

Each year farmers are asked for investment plans in the coming year. These results are compared to their planned investment at the same time last year i.e. planned investment

in 2004 versus planned investment in 2005. In the autumn of 2005, 22,408 farmers stated that they planned on investing an average of €15,291 per farm in 2005 giving a total investment of €343 m. This is similar to the 22,160 farmers who planned additional investment in the autumn of 2003 for the 2004 year, but average planned investment per farm was lower at €13,186 for 2004. Overall planned investment for 2005 was €65 million or 22% higher than that planned for 2004 (Table 1.10).

Table 1.10: Farm investment planned for 2005 (€m) by investment type compared to planned 2004 investment.

	2005		2004		Change	
	€m	%	€m	%	€m	%
Machinery	105	29	64	22	+41	+64
Buildings	167	47	117	40	+50	+42
Land	42	12	73	25	-31	-42
Milk quota	29	8	31	11	-2	-6
Other	14	4	7	2	+7	+200
Total	357	100	292	100	+65	+22

Source: Teagasc National Farm Survey

However actual investment seldom turns out as planned and the 2004 year was no exception. The actual investment by farmers in 2004 was much higher than that planned viz. 38,587 farmers actually invested a total of €638 m or €16,524 per farm. In the past farmers have always understated planned investment in machinery and 2004 was no exception with an actual investment in machinery of €275 m compared to that planned of €64 m. The actual investment in farm buildings in 2004 was also higher than that planned i.e. planned €117 m but actually invested €155 m. Actual investment in milk quota in 2004 was €43m compared to that planned of €31 m. If the above pattern of understating investment is repeated, then actual farm investment in 2005 could be in the region of €780 m.

Table 1.11: Planned farm investment by system of farming 2004 and 2005

	2005		2004	
	€m	%	€m	%
Dairying	182	51	136	46
Cattle	110	30	80	27
Sheep	32	9	55	19
Tillage	33	10	21	7
Total	357	100	292	100

Data in Table 1.11 shows that dairy farmers continue to account for the bulk of planned investment at 51%. However it should be noted that this percentage is declining as it was almost 60 per cent in the late 1990's and declined to 49% in 2003 but increased to 51% in 2005. Planned investment on cattle and tillage farms have remained fairly constant with planned investment by sheep farmers returning to their normal investment pattern of approximately 10% of the total investment on all farms.

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THE SITUATION AND OUTLOOK FOR DAIRYING 2004/2005

Billy Fingleton

Review of 2003

The actual financial results for dairying for 2003, based on the National Farm Survey (NFS), were somewhat better than expected. The value of gross output per cow and per hectare (ha) were static as expected but total input costs were reduced in 2003 by about 4%. Reductions of roughly the same magnitude were made in both direct costs and overhead costs. Lower direct costs were mainly as a result of reduced feed costs. Reductions in depreciation, interest charges and land rental payments mainly accounted for the fall in overheads. The effect on margins per cow and per ha were that average gross and net margins were 6% higher.

Table 1: Gross output, Costs and Margins per Cow and per Hectare; manufacturing milk (good soils) (2003-2005)

	€ per Cow			
	2003	**2004**	**2005**	**2005**
Gross output	1432	1485	1451	1338
Direct costs	464	458	454	454
Gross margins	968	1027	996	883
Overhead costs	416	420	428	428
Net margin	552	608	568	455
	€ per Hectare			
Gross output	2834	2940	2872	2649
Direct costs	918	906	899	899
Gross margins	1916	2034	1973	1749
Overhead costs	823	831	848	848
Net margin	1094	1203	1125	902

The year 2003 was an above average year for grass growth and utilisation but increased inputs of purchased feed were required in the first quarter to enable many dairy farmers to fill their milk quota entitlements. The poor farm year of 2002 had led to a fall in average milk yield for the first time since 1997. But with the better grazing conditions in 2003, the upward trend in yields was re-established (+1.3%). Actual results per cow and per ha (good soils) for 2003 are shown in Table 1 and results per litre of milk produced are shown in Table 2 for specialist manufacturing milk producers.

2004-further Recovery in Margins

The estimated outturn for 2004 is much better than was expected a year ago for dairying. Both gross and net margins earned per cow and per ha are estimated to be higher on average by 6% and 10% respectively. This brings the cumulative increase in net margins since 2002 to almost 17%. However, the average net margins estimated for

this year are still €70 per cow and €150 per ha below those achieved in the 'good year' of 2001.

Positive developments in the components of gross output almost totally account for the improved results in 2004. Milk prices paid to Irish producers were held steady despite the expectation of prices weakening due to the first cut applied to EU intervention (IV) prices from July 1st, under the MTR policy reforms. However the first phase of compensation for the institutional price cuts was paid to all eligible dairy farmers in the current year. As this payment is still coupled to production it is included in enterprise output for 2004. Another small contribution to growth in output came from an unexpected increase in calf values on dairy farms. Overall the unit value of gross output was estimated to have increased by over 3.5% in 2004.

Why didn't milk prices fall in 2004? A year ago there were several factors in play more likely to result in price reductions than maintaining 2003 price levels. Even before the July 1st IV price cuts came into effect, it was anticipated that enlargement of the EU from May 1st might result in stored produce from some EU 10 countries being placed in IV to avail of better returns. This did not happen then or even later, there was no 'supply' pressure on IV from new member states. In fact, placement of produce in IV was at a notably reduced level in 2004. Over 50% less butter and 81% less SMP were intervened. The more positive outcome for milk price than expected was essentially due to a major increase in international demand for dairy products and this coincided in increases in production being limited by constraints in milk production in the EU and in Oceania (particularly in Australia).

World dairy product prices have risen by 20% to 30% this year. Even in the EU market prices for commodity products are currently 4% to 6% above EU support prices. This is a remarkable market situation given the continual cuts in export refunds and the relative strength of the Euro against the US dollar, the main trading currency.

Table 2: Output, Costs and Margins per litre Milk produced specialist Dairy Farms Manufacturing Milk (2001-2005)

	2001 Actual	2002 Actual	2003 Actual	2004 Estimate	2005 Forecast Inc. DP's	2005 Forecast Exc. DP's
Gross output	30.73	28.47	28.05	29.1	28.42	26.15
Direct costs	9.11	9.64	9.16	9.04	8.97	8.97
Gross margins	21.62	18.82	18.89	20.06	19.45	17.17
Overhead costs	8.77	8.55	8.13	8.21	8.38	8.83
Total Input Costs	17.88	18.2	17.29	17.25	17.35	17.35
Est. Net Margin	12.85	10.27	10.76	11.84	11.08	8.8

Milk Production costs stable in 2004

Following the reduction in 2003, total input costs per unit of production are estimated to be about the same in 2004. A small decline in direct costs have been offset by a marginal rise in overhead costs. Feed costs are down again mainly due to an estimated 10% reduction in the volume of purchased feed used. However the major impact this could have had on costs was largely diluted by a rise of 6.5% in the price of concentrates. Forage costs remained very similar to those for 2003. Reduction in the quantities of fertiliser used were largely offset by increased fertiliser prices particularly of CAN and Urea. An increase in forage conservation was also included in estimates for 2004 as fuel and labour costs increased. But the quantity of silage conserved on dairy farms is on a limited but persistent downward trend in recent years. Despite a small reduction being recorded for overhead costs in 2003, a conservative rise in line with inflation of 2% has been applied for 2004.

The Outlook for Dairying in 2005

From one year to the next, the change in milk price received is usually the main determinant of margins attained. Given the new price support policies in place and their continued application in 2005 by way of further price cuts, it is most likely that prices paid for milk will fall in 2005. It is not an outcome that can be stated with full certainty, recognising the current buoyancy in the international markets for dairy products. However, I take the view that the main questions to be addressed are when will the milk price start to fall and by how much on an annualised basis in 2005.

A number of positive factors will apply in the short term at least. Milk supplies in New Zealand for the early months of the new season have been at a lower level than a year previously and milk producers have been more restrained in use of supplementary feeding in view of lower New Zealand prices paid last year. There is also some controversy about how a strengthening New Zealand dollar against $US may force down milk prices derived from international dairy markets in the next two years. Also the price of land for conversion to dairy farming is reaching new highs making it very difficult for new entrants to gain access via the share milking ladder. The total number of dairy farmers in New Zealand is falling at an increasing rate again with a reduction of nearly 3% in 2003/04. Milk production in Australia has still not regained much of the national production lost in the severe drought year of 2002/03. Whilst the new season production to date has not exceeded last years level yet nationally, milk production in the main dairy exporting state Victoria, is showing growth again. But the Australian market has had to rely on substantial imports of cheese from New Zealand as exporters decided to maintain Australian exports to Japanese markets and sacrifice some domestic markets until milk supplies return to previous levels. Lower Australian grain prices and more plentiful feed may induce milk producers to generate higher milk production but it is likely that dairy product inventories will be slow to return to pre-drought levels.

The return of major economic growth in Asian economies has been a major driver behind the more buoyant prices for traded dairy products. A recent Rabobank report has put the rate of increase in China’s dairy product consumption at 14% per annum. New Zealand exports to China are growing fairly rapidly, having doubled between 1999 and

2004. It may well be that we will see a much greater expansion and concentration of New Zealand and Australian dairy exports to the developing Asian markets with decreasing exports to other markets especially to Europe.

Another very positive development has been the running down of intervention stocks in the EU and in the US. It is now predicted that EU public stocks of SMP will be gone very soon and the stocks of SMP (NFDR) in the US are only a fraction of what they were a couple of years ago. Butter stocks in the EU are also running down but ample stocks will remain well into 2005 and probably beyond.

There are also some factors likely to put downward pressures on prices next year. The main one is that a further cut in support prices for butter and SMP will encourage the Commission to reduce export refunds and make use of other mechanisms available to prevent a major gap between intervention equivalent prices and internal market prices. The agreed increase of 1.5% for most countries in national milk quota under Agenda 2000 also comes into effect in 2005/06 and an overall shortfall of about 1% in milk production in the EU 15 in the current year could also be reversed next year. Milk deliveries in the new member states grew by about 1% this year and may grow again next year as prices have been more attractive. Milk production in the US this year was lagging market demand and dairy commodity prices reached record levels. As butter prices reached very high levels there was extra out of quota butter imports allowed in to dampen prices. Next year most forecasts expect supply and demand to be more in balance as milk producers in the US tend to respond very rapidly to high milk prices by increasing production.

Taking all factors discussed into consideration there is a general feeling of continued optimism for dairy product prices in the earlier months of 2005. Later in the year expanded production may catch up with demand. In the forecasts shown a milk price reduction of 4% for the full year has been applied. Dairy calves are also likely to significantly decline in value next year as decoupling also applies to cattle production. A reduction of 20% in calf value has been assumed. Little change is expected in replacement costs.

The expectation then is that the value of gross output will fall by over 2% on a unit basis and to maintain a like for like comparison the increased MTR milk payment of 2.36cpl has been included. However, as will be discussed later, any rational financial evaluations of Irish dairy enterprises in future should be conducted after excluding decoupled compensatory payments.

Production costs in 2005

Data presented on input costs for recent years in Table 1 and Table 2 show that Irish dairy farmers have had some success in controlling costs. According to the most recent CSO published data, agricultural input prices have risen by almost 14% from mid-2000 to September 2004. Results for specialist dairy farms in the NFS over that period show that unit costs are about the same or marginally lower in 2004 than they were in 1999/2000. This indicates that the volume of inputs has fallen in milk production and that production efficiency has improved.

The outlook for costs in 2005 is essentially based on the assumption that costs will continue to be held in check, with the usual caveat that weather will be 'normal'. Purchased feed costs are expected to fall next year with dairy concentrate prices down by about 6%. Also, given the very good quality forage conserved this year and the probable pressure to reduce over quota production in early Spring, the use of concentrates should be reduced. It may be argued that with two good grazing years following each other and the unlikely event of a third in a row then purchased feed use may rise rather than fall. But economic realities will probably prevail and the response to falling margins (excluding decoupled payments) should be a further reduction in purchased feed. The expectation on forage costs is less optimistic. Fertiliser prices, particularly CAN and UREA, are expected to increase by 10% to 12% per tonne. The switch to relatively cheaper high N compounds in 2004 will probably continue but there is great uncertainty at this time as to availability and price for fertilisers. It appears that most of the fertiliser supplies for use in 2005 have yet to be purchased internationally. The much higher and more volatile oil prices and increased energy costs have caused prices to rise and buyers to be more cautious. Given the price rises expected there should be some reduction in use but not of a corresponding magnitude. Unit costs have therefore been increased for home production forage by 8% and 4%, respectively, for grazed grass and conserved forage. As a result, total feed costs will only be marginally lower in 2005 as lower purchased feed costs are largely offset by higher forage costs. Other direct costs should remain similar to 2004.

The small but perceptible fall in overhead costs since 2002 may be difficult to achieve again in 2005 and a small increase of 2% has been built into the forecast. If fuel/energy costs return to lower levels and spending on capital items can be strictly controlled then any rise in overhead costs may be averted. In summary therefore total unit input costs are forecast to rise only marginally by less than 1% next year.

Margins under pressure in 2005

As shown earlier, the value of gross output will fall due to price reduction for milk and calves. The fall would be just over 2% if MTR payments for milk were included. Together with the small rise in costs this would give reductions in unit gross margins and net margins of 3% and 6.5% respectively. But since milk payments are to be decoupled from 2005 onwards, the more rational approach is to exclude the payments from future financial assessments of dairy enterprises. Thus the resultant forecast for 2005 relative to 2004 is that gross output values fall by 10%, gross margins by 14% and net margins by a remarkable 25%.This outcome underlines the new reality for milk producers in Ireland post decoupling. Given the virtually universal expectation that milk price cuts are likely to be deeper in the next few years, there is a pressing need to re-align the current cost levels relative to much reduced output values.

THE SITUATION AND OUTLOOK FOR CATTLE 2004/05

W. Dunne[1]

OVERVIEW

An analysis of the data on the cattle enterprise for the 1,000 plus farms in the Teagasc, National Farm Survey (NFS) shows that the gross margin declined by €9/hectare in 2003, and, for the first time, the gross margin for farms involved in cattle fattening turned negative. An estimate of the likely out-turn for 2004 indicates that the aggregate gross margin will again decline. A forecast for 2005 suggests a further reduction in the aggregate gross margin. However, it is forecast that the aggregate net margins of cattle farms will benefit substantially from a payment overlap arising from the move to the Single Farm Payment (SFP) system being implemented in 2005. This could result in an aggregate revenue injection of the order of €550 million in 2005 compared with previous years.

Introduction

This review and outlook of trends in cattle farming in Ireland is divided into four broad segments. These are:

- A brief review of policy adjustments and their implications
- A summary analysis of the cattle enterprise margins achieved on the farms in the Teagasc, National Farm Survey (NFS)
- An estimate of costs and margins for the aggregate cattle sector for 2004
- A forecast of costs and margins for the aggregate cattle sector for 2005.

The opening section reviews the evolving EU policy under which the Irish cattle enterprise has functioned in recent years to provide a context for the interpretation of the costs and margins. A substantial portion of the paper is devoted to a detailed analysis and interpretation of the actual margins achieved for the cattle enterprise on the 1,000 plus farms in the NFS. The most recent available data from the NFS is for the year 2003. The margins for 2003 are evaluated and compared with similar data for the two preceding years.

Following this appraisal, a short review is presented of market conditions that prevailed in 2004, leading to an estimate of the likely changes in the aggregate costs and margins. The final section of the paper focuses on the outlook for 2005, culminating with a forecast of the likely revenue, costs and margins for the aggregate cattle enterprise.

POLICY AND MARKET CONTEXT

The following is a summary of the main external factors affecting the costs and margins in cattle farming during the period evaluated. Scheduled and unscheduled changes in

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the EU beef regime have in recent years increased the complexity of any analysis and interpretation of trends in the margins for the Irish cattle enterprise.

The economic survival and prosperity of cattle farmers should normally depend on their capacity to exploit their animal husbandry skills and integrate them with information on input and output prices. But, over the last decade due to the increasing economic impact of the animal based direct payments, cattle farmers also became very dependent on their ability to skilfully manage a mix of information on:

- the value of each individual DP
- the definitions for the various animals for eligibility for DPs, which have changed over the period
- the cattle register with related information on dates of birth, gender and premium status for individual animals
- the rules and application forms for area aid, suckler cow premium, special beef premium
- the rules and census dates for extensification, and
- the retention periods required for specific animals.

With these skills cattle farmers endeavoured to maximise their margins based on the best combination of the individual direct payments that have been increasing in value, market or factory returns that have generally been declining in value, and production costs that were rising.

The interpretation of the annual margins for the cattle enterprise has also become problematic due to periodic adjustments made to the pay-out rate for the first moiety of the DPs. This facility has been available to and used by the Minister to respond to the evolving market conditions. For example, the pay-out rate of the 1st moiety of the direct payments (DPs), was increased from the normal 60%, to 80% in 2001, 2002 and 2003. But, the normal rate of 60% was applied in 2004.

Such adjustments have a dual impact on the comparisons of annual margins as:

- it shifts cattle DP revenue between years without increasing total farm revenue, and
- the individual farmers most affected by the fluctuations in cattle prices and costs are generally those that are least dependent on the value or the rate of pay-out of the DPs.

Also, the pay-out rate adjustments do not apply to all DPs. Therefore, the inter-year effect varies depending on the specific DP, or mix of DPs, that are relevant to the individual farm or groups of farms.

For Irish cattle farmers, 2004 marks the end of a decade of these animal-based direct payments and their related complications. In the future, much of this complexity will be

history with the advent of the decoupling of the animal-based payments and the switch to the new Single Farm Payment (SFP) in 2005. Hopefully, cattle farmers will be able to find alternative and profitable outlets for the undoubted administrative and data management expertise that they have acquired over the last decade, otherwise a valuable resource may be lost.

Since the decoupling does not occur until 2005, the change only had an indirect effect on the estimates for 2004. Most of this arises from the "washout" of the capitalised value of the existing DPs from the prices of some calves and young animals in 2004 and from all the traditionally eligible animals thereafter.

REVIEW OF 2003

As in previous years, the data for the actual margins for the cattle enterprise, expressed in euro per forage hectare (€/ha), were obtained from farms in the Teagasc, National Farm Survey (NFS). The results are presented for:

- the total gross margin per hectare which is the gross revenue less direct costs, and
- the market based gross margin per hectare which is the gross margin less the enterprise specific direct payments (DPs).

Gross margins

The gross margin results from the NFS for the year 2003 together with the comparable data for the two preceding years are presented in Table 2.1.

Compared to 2002, the overall outcome for 2003 is a reduction in nominal value of the gross margin for the aggregate cattle enterprise by €9 per forage hectare (€/ha). This relatively small decrease masks substantial differences in the changing fate for individual segments within the overall cattle enterprise. For example, the margin for "single suckling" increased by €21, and follows on an increase of €58 for the previous year. In contrast, the margins for the "rearing on dairy farms", and the "weanlings to stores/finish" systems declined by €38 and €81 respectively. These reductions more than offset the relatively small increases that occurred in 2002. For the "stores to stores/finish" system the margin declined by €71 in 2003 but this at least followed an increase of €80 in 2002.

Table 2.1: Trends in Gross Margins for Cattle (€/ha)

	2001	2002	2003
Single Suckling	412	449	470
Rearing – Dairy Farms	568	591	553
Weanlings to Stores/Finish	506	543	462
Stores to Stores/Finish	365	445	374
All Cattle Systems	469	497	488

Source: Teagasc, National Farm Survey

Costs

Apart from years with particularly adverse weather conditions, like 1999, Irish cattle farmers had been very successful at containing direct costs, excluding the costs of animals that they must purchase. But, in each of the four years since 1999 direct costs have increased. The total increase over the four years has been €35/ha, of which €11 occurred in 2003. The main source of the increase was the cost of purchased concentrate feed, perhaps, reflecting the added emphasis on getting animals to slaughter weights at a younger age.

Market based margins

A rather different picture on margins emerges when the value of the direct payments (DPs) are excluded and the market based margins are calculated (Table 2.2). As in most of the previous years, the market based margins continued their downward trend. For "all cattle systems" the decrease in 2003 was by €26/ha, equivalent to a 17% reduction. This follows a somewhat smaller reduction in 2002.

Over the last decade, cattle farmers were becoming increasingly dependent on DPs for their margins and income. But access to the DPs remained tied to the numbers of specific animals, the supply of which is controlled by quotas and quasi-quotas. Consequently, an increasing portion of the value of the DPs are being capitalised into the prices of calves and young cattle[2]. This capitalisation process has cushioned the decline in the market based margins for the two breeding systems ("single suckling" and "rearing on dairy farms") but it has hastened the decline for the comparable margins for the cattle finishing systems.

Reverting to the data in Table 2.2, the farmers in the "single suckling system" in 2003 succeeded in maintaining their market-based margin. Farmers involved in the "rearing on dairy farms" production system still obtained the largest absolute margin from the market when compared with other cattle systems. But, compared with 2002 they experienced a decline of €10/ha. This follows another reduction of €58 in 2002 resulting in a decline of 24% over the two year period.

Table 2.2: Trends in Market-based Gross Margin for cattle (€/ha)

	2001	2002	2003
Single Suckling	139	139	133
Rearing – Dairy Farms	281	223	213
Weanlings to Stores/Finish	88	58	-56
Stores to Stores/Finish	34	26	-51
All Cattle Systems	171	149	123

Source: Teagasc, National Farm Survey

As expected, the market-based margins for the two cattle fattening systems of "weanlings to stores/finish" and "stores to stores/finish" showed much larger reductions,

[2] This capitalisation process will be reversed once the DPs become decoupled from the animals and their value is converted into the Single Farm Payment (SFP) post 2004

a decline by €114/ha and €77/ha respectively. For a number of years the market-based margins for these finishing systems have been declining. And in recent years they were so small that these cattle farmers could only survive by skilfully managing their production technology, plus purchases and sales, within an administrative armoury for the DPs referred to earlier in this report. However, they reached a new economic milestone in 2003 when the market-based margin finally became negative. For these farmers in 2003, the value of their cattle sales were less than the direct costs of production. Consequently they had to divert the equivalent of over €50/ha, or in excess of 10%, of the value of the DPs just to cover the direct costs of their cattle enterprise.

In normal circumstances, this would be interpreted as the economic signal for these farmers to quit the cattle enterprise entirely. However, if they had quit the enterprise because of the negative market-based gross margin they would also lose their access to the DPs which are in fact their income. It is little wonder then that this category of cattle farmers has been the primary advocate of the decoupling of the DPs.

Once decoupling is implemented, the relative prices of the different cattle cohorts will adjust as the capitalised value of the DPs gets washed-out of young cattle prices. Furthermore, a realignment of both the level and composition of other costs will likely occur as cattle production systems are reformulated to accommodate the new economic realities. Then, a positive market-based gross margin for the farmers involved in cattle finishing will return. However, margins are likely to remain modest and the main source of income in the future will be the decoupled SFP.

Market focus

When the cattle enterprise is examined from a beef market rather than a cattle production perspective, further concerns arise. The proportion of the gross margin that is derived from the market in any one year is influenced by periodic adjustments made by the Minister to the pay-out rate for the DPs. Nevertheless, as the data in Table 2.3 demonstrate, the proportion of the gross margin that Irish cattle farmers derive from the market continues to decline, and by 2003 was only 25% for the entire cattle sector.

As already discussed, the market-based margin for the two fattening systems disappeared completely in 2003. Consequently, the main economic focus for this group has to be to get access to DPs and then retain as much of their value as possible.

While both of the breeding systems still appear to get approximately 30% of their gross margin from the market, even this figure is somewhat illusory. As already noted, much of this apparent market return arises as a consequence of the DP capitalisation process. Furthermore, the main market for the cattle that are sold from these breeding systems is to provide young animal inputs for the farmers involved in cattle fattening, and these farmers rely almost exclusively on DPs for even their gross margin.

Table 2.3: Market-based gross margin as a % of total

	2001	2002	2003
Single Suckling	34	31	28
Rearing – Dairy Farms	50	38	39
Weanlings to Stores/Finish	17	11	-12
Stores to Stores/Finish	9	6	-14
All Cattle Systems	37	30	25

Against these results, it is perhaps opportune that the decoupling of all animal-based DPs is imminent. Otherwise, the market focus for Irish cattle production could be totally lost if the current payment system persisted much longer. The introduction of the SFP will allow Irish cattle farmers redeploy their management efforts towards better exploitation of their grassland and animal husbandry skills and refocus the resulting output in the direction of the requirements of the beef consumer.

ESTIMATES FOR 2004

EU intervention stocks were finally exhausted in 2004 and the much feared inflows of low priced meat and cattle supplies arising from the enlargement through the accession of 10 new Member States did not materialise. When these supply adjustments are combined with the continued recovery of beef consumption it was inevitable that cattle prices would strengthen, especially in Ireland. As expected the price recovery was greatest for cow beef.

In Ireland, an excellent grazing and fodder season helped reduce costs, sustain cattle prices and provide overall confidence in the sector. The end result was orderly marketing and cattle slaughterings thereby reducing the possibility of an end of season glut of unfinished animals for slaughter just prior to the phasing out of the slaughter premium.

Apart from Russia, Irish exports to 3rd countries remained small. The strong British demand that existed for beef imports in 2003 continued throughout 2004 and this provided a volume outlet for Irish beef.

Revenue

The recovery in cattle prices in 2004 was substantial, in excess of 10% for steers and almost twice as large for cull cows. The number of young bulls slaughtered almost doubled in 2004. But, this may be a once off change as a result of the **move to** decoupling of all the DPs in 2005.

Unless there is surge of slaughterings in December 2004 to avail of the slaughter premium before it is discontinued in January, the number of male animals slaughtered is likely to be lower than in 2003. Heifer slaughterings may also be lower in 2004. The live cattle trade showed the largest change with the numbers of both calves and weanlings reduced to about half that for 2003. When the price and volume changes are combined it is estimated that the value of sales could increase by about 7% in 2004. As anticipated, the price of calves in 2004 remained strong and resulted in a leakage of this revenue to the dairy sector.

For the first time in a number of years, the normal pay-out rate for the 1st moiety of the DPs reverted to 60% in 2004. However, estimating the revenue from DPs in 2004 is complicated by the introduction of decoupling at the end of the year. As already noted, there was an economic incentive to switch to bull beef and avail of the higher value premium for bulls and to slaughter all eligible animals before the end of the year to avail of the slaughter premium.

Although the number of applications for SBP animals may not breach the revised quota ceiling, there is likely to be an end of year increase in the applications for SBPs before the premium is phased out in January. This bias towards the end of year applications further compounds the difficulty in estimating the actual number of SBP eligible animals in 2004. Furthermore, it is likely that a higher than normal percentage of the 1st moiety payments for 2004 SBP and slaughter premium applications will not arise until 2005.

When the reduced pay-out rate (60%) and the end of year bias factor are taken into account, the estimated revenue from DPs arising in 2004 is likely to be reduced by close to 15%.

Costs

Apart from the added cost of calves in 2004, most other direct costs could be lower in 2004 due to excellent grazing and forage conditions over most of the country. With the added emphasis on early marketing, some farmers continued feeding supplementary concentrates but the overall usage and cost of concentrate feeding is likely to decline due to both price of concentrates and the good weather and forage situation.

Margins

A summary of the above estimates of revenue and costs and the resulting estimate of gross margin for 2004 is presented in Table 2.4. It is estimated that the gross margin for the aggregate cattle enterprise for 2004 could be lower by about 3% on 2003. The estimated increase in revenue from higher cattle prices and somewhat lower costs were not sufficient to fully offset the reduction in revenue from the reduced pay-out rate for the DPs.

FORECAST FOR 2005

Probably the two key overarching factors affecting the outlook for 2005 are the impact of the shift to the SFP and the increasing value of the euro. Since it is an unprecedented occurrence, it is very difficult to predict the full economic impact of the decoupling of the animal-based DPs. But this fact alone may be sufficient to prevent precipitous actions by the major stakeholders at least in 2005.

The impact of increasing strength of the euro has a number of dimensions. These include a negative price and volume impact on exports to non-euro regions, cheaper imports from such regions which may have beneficial effects on input costs. There is also an EU budgetary aspect especially in relation to the cost of export refunds, but with a reduced dependence on 3rd country exports this may be of declining importance.

Revenue

As the end of the 2004 season approaches, Irish cattle and cow prices have remained firm. Also, the prices of young cattle and weanlings have been surprisingly firm in the autumn, despite the move to decoupled DPs. The retention of the slaughter premium in a number of Member States in 2005 will help to maintain the demand for and prices of Irish calves and weanlings. There could be some realignment of trade flows, especially for live animals, in the first full year of an enlarged EU.

The strong British demand for cattle and beef imports evident in 2004 will likely continue in 2005. The main undefined factor is probable extra supplies arising from the re-entry into the food chain of over thirty month (OTMs) animals in the UK. These additional supplies would mainly impact on the market for cow beef. Such a change is likely to be well signalled in advance and implemented on a planned basis allowing the market to gradually adjust to the extra supply. Because of the current EU market balance for beef this extra supply will now be entering a deficit market.

The added strength of the euro could cause short-term price and trade problems in the UK market while consumers are adjusting to the higher cost of meat imports from the euro zone. The demand for beef in Britain and Continental EU is likely to ensure that Irish cattle prices in 2005 could be at least maintained or may even increase slightly on those prevailing in 2004.

The lack of intervention stocks has traditionally resulted in a narrowing of the price differential between Irish and continental EU prices. The relatively strong demand from Spanish and Italian feedlots is likely to continue for live exports of weanlings and

possibly for young store cattle, especially if the price of young animals in Ireland declines significantly following decoupling.

Unless there is serious de-stocking of suckler cows as a consequence of decoupling, which seems premature in 2005, it is forecast that the overall volume of slaughterings and live exports will again decline marginally. It is therefore forecast that the value of sales will decline slightly in 2005.

Cattle farmers in 2005 will continue to obtain revenue from animal-based DPs arising from their 2004 animal applications. The scale of this outstanding revenue is substantial: a full set of extensification payments, 40% of the value of the 2004 suckler cow, special beef, and slaughter premiums. Also due is the value of the 1st moiety (60%) premiums on the higher than normal number of end of year animals in 2004. Nevertheless, the overall value of animal-based DPs will be reduced substantially in 2005 because there will be no animal-based DPs payable in the autumn due to decoupling. However, Irish farmers will receive their SFP in December 2005. Since the SFP is not enterprise specific, such revenue is not part of the enterprise margin.

Costs

Calf costs particularly those derived from the dairy herd are likely to decline as the capitalised value of the animal-based DPs are liquidated following decoupling. However, the reduction in 2005 may be modest due to the retention of the animal-based slaughter premium in a number of Member States, especially for the veal market. Apart from calf costs, most other direct costs are expected to remain largely the same in 2005, should the euro remain strong. However, the very favourable grass and forage situation of 2004 is unlikely to be repeated. But, the price of concentrate feed is likely to be lower in the event of a feed or fodder problem arising. Furthermore, with the elimination of the animal-based DPs and related compliance criteria, cattle farmers are likely to encounter cost efficiencies in feed and forage use.

Margin forecast

Summary data of the forecasts of revenue, direct costs and the resulting gross margin for 2005 is shown in Table 2.4. While this forecast contains many variables that are difficult to quantify, it shows that the actual gross margin for the aggregate cattle enterprise will decline sharply by €105/ha in 2005 relative to 2004. This is a reduction of 22% on 2004, which was also down relative to 2003.

This however is an incomplete representation of the economic outlook for cattle farms in 2005. Cattle farms in 2005 will also benefit from revenue arising from the decoupled SFP and this is scheduled for payment in December 2005. To incorporate the revenue arising from the SFP, a forecast of net margin for 2005 was prepared (Table 2.4). Also presented in Table 2.4, is an estimate for 2004, and the actual results for the three previous years. This forecast shows that the net margin on cattle farms could more than

double in 2005 but almost all of this is due to the combined impact of the phasing out of the animal-based DPs and the phasing-in of the SFP. Should this forecast prove to be reasonably accurate, the overall impact would be that Irish cattle farmers can look forward to additional income of the order of €550 million in 2005 compared to the preceding years. Hopefully, they will spend this, more or less once-off, bounty wisely and not artificially inflate the prices of young cattle in the autumn or compromise future production costs by imprudent capital investments.

Table 2.4: Trends in revenue, costs and margins for all cattle systems (€/ha)

	2001	2002	2003	2004[i]	2005[ii]
Revenue	836	877	880	856	743
Direct Costs	367	381	392	384	377
Gross Margin	469	496	488	471	366
Net Margin	189	212	194	186	419[3]

Source: Teagasc, National Farm Survey and author's estimates
[i]Estimate [ii]Forecast

SUMMARY AND CONCLUSIONS

The most recent available data for the cattle enterprise from NFS is for 2003. An analysis of this data shows that the overall outcome for 2003 was a reduction relative to 2002 in the nominal value of the gross margin for the aggregate cattle enterprise by €9 per forage hectare (€/ha). But, the margin for "single suckling" increased by €21, and follows on an increase of €58 for the previous year. In contrast, the margins for the "rearing on dairy farms", and the "weanlings to stores/finish" systems declined by €38 and €81 respectively. These reductions more than offset the relatively small increases that occurred in 2002. For the "stores to stores/finish" system the margin declined by €71 in 2003 but this at least followed an increase of €80 in 2002.

Direct costs for the aggregate cattle enterprise have increased in each of the last four years by €35/ha. But €11 of this occurred in 2003, mainly due to higher expenditure on purchased concentrate feed, perhaps, reflecting the added emphasis on getting animals to slaughter weight at a younger age.

A rather different picture on margins emerges when the value of the direct payments (DPs) is excluded and the market based margins are calculated. As in most of the previous years, the market based margins continued their downward trend. For "all cattle systems" the decrease in 2003 was €26/ha, equivalent to a 17% reduction. This follows a somewhat smaller reduction in 2002.

[3] includes the estimated value of SFP that cattle farmers would have received under the animal-based DP system

Farmers involved in the “single suckling system” in 2003 almost succeeded in maintaining their market-based margin for the second year running. While those involved in the “rearing on dairy farms” production system still obtained the largest absolute margin from the market in 2003. But, compared with 2002 they experienced a decline of €10/ha, added to another reduction of €58 in 2002 resulting in a decline of 24% over the two year period.

As anticipated, the market-based margins for the two cattle fattening systems of “weanlings to stores/finish” and “stores to stores/finish” showed much larger reductions, a decline by €114/ha and €77/ha respectively. These farmers reached a new economic milestone in 2003 when the average market-based margin finally became negative. The value of their cattle sales were less than the direct costs of production and consequently they had to divert the equivalent of over €50/ha, or in excess of 10%, of the value of the DPs just to cover the direct costs of their cattle enterprise.

In normal circumstances, this would be interpreted as the economic signal for these farmers to quit the cattle enterprise entirely. However, if they had quit the enterprise in response to the negative market-based gross margin they would also lose their access to the DPs which are in fact their income. As a consequence, the main economic focus for this group of farmers is to get access to DPs and then retain as much of their value as possible rather than focus on the requirements of the beef consumer. It is no surprise that this category of cattle farmers has, for a number of years, been the primary advocates of the decoupling of the DPs.

Once decoupling is implemented in 2005, the relative prices of the different cattle cohorts will adjust as the capitalised value of the DPs gets de-capitalised from young cattle prices. In addition, a realignment of both the level and composition of other costs will likely occur as cattle production systems are reformulated to accommodate the new economic realities. Then, a positive market-based gross margin for the farmers involved in cattle finishing will return, but margins are likely to remain modest and the main source of income in the future will continue to be the decoupled Single Farm Payment (SFP).

Cattle prices recovered in 2004, by in excess of 10% for steers and almost twice as large for cull cows. The number of male animals slaughtered is likely to be lower than in 2003 and the live export of both calves and weanlings were reduced to about half. When the price and volume changes are combined it is estimated that the value of sales could increase by about 7% in 2004.

Unlike previous years, the pay-out rate for the 1st moiety of the DPs reverted to 60% in 2004. With decoupling imminent, there were higher than normal incentives towards the end of year bias for accessing DPs. When this bias is combined with the effect of the

reduced pay-out rate (60%), it is estimated that the revenue arising from DPs in 2004 will decline by close to 15%.

Apart from the added cost of calves in 2004, most other direct costs could be lower due to excellent grazing and forage conditions over most of the country.

It is estimated that in 2004, the increased revenue from higher cattle prices and somewhat lower costs were not sufficient to fully offset the revenue reduction arising from the lower pay-out rate for the DPs. Consequently, the gross margin for the aggregate cattle enterprise for 2004 could be about 3% lower than in 2003.

The impact of the shift to the SFP is the key factor affecting the outlook for 2005. The rapidly increasing value of the euro has a number of dimensions that could impact on production costs, cattle prices and the EU budget management aspects. The return to the food chain of older beef animals in the UK in 2005 is also of concern.

The retention of the slaughter premium in a number of Member States in 2005 will help to maintain the demand for and prices of Irish calves and weanlings but there could be some realignment of trade flows in the first full year of an enlarged EU.

The strong British demand for cattle and beef imports, evident in 2004, will likely continue in 2005. The possible re-entry into the food chain of over thirty month animals is likely to be well signalled and implemented on a planned basis allowing the market to gradually adjust to the extra supply. Because of the current EU market balance for beef this extra supply will be entering a deficit market. The demand for beef in Britain and Continental EU is likely to ensure that Irish cattle prices in 2005 could be at least maintained or may even increase slightly on those prevailing in 2004.

Unless there is serious de-stocking of suckler cows as a consequence of decoupling, which seems premature in 2005, it is forecast that the overall volume of slaughterings and live exports will again decline marginally. It is therefore forecast that the value of sales will decline slightly in 2005.

Irish cattle farmers in 2005 will continue to obtain substantial revenue from animal-based DPs arising from their 2004 eligible animals. Nevertheless, the overall value of the animal-based DPs will be reduced substantially in 2005 because there will be no animal-based DPs payable in the autumn due to decoupling. However, Irish farmers will receive their full SFP entitlements in December 2005 but the SFP is not enterprise specific and therefore is not part of the enterprise margin.

The reduction in calf prices in 2005 may be modest due to the retention of the animal-based slaughter premium in a number of Member States, especially for the veal market. Most other direct costs are expected to remain largely the same in 2005, aided by the strong euro. The very favourable grass and forage situation of 2004 is unlikely to be repeated, but, the price of concentrate feed will be lower in the event of a feed or fodder problem arising. Cost efficiencies in feed and forage could arise with the elimination of the animal-based DPs and their related compliance criteria.

Combining these forecasts of revenue and costs, the actual gross margin for the aggregate cattle enterprise is forecast to decline sharply by €105/ha in 2005 relative to 2004. This is a reduction of 22% on 2004 which followed a small reduction in 2003. However, this is an incomplete representation of the economic outlook for Irish cattle farms in 2005.

Cattle farms in 2005 will also benefit from revenue arising from the decoupled SFP, scheduled for payment in December 2005. To incorporate the revenue arising from the SFP, a forecast of net margin for 2005 was prepared. This forecast shows that the net margin on cattle farms could more than double in 2005 but almost all of this is due to the combined impact of the phasing-out of the animal-based DPs and the phasing-in of the SFP.

Should this forecast prove to be reasonably accurate, the overall impact would be that Irish cattle farmers can look forward to additional income of the order of €550 million in 2005 compared to the preceding years. Hopefully, this once-off bounty will not artificially inflate the prices of young cattle in the autumn of 2005 or compromise future production costs by imprudent capital investments.

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SITUATION AND OUTLOOK FOR TILLAGE 2004/05[4]

F.S. Thorne

Introduction

The 2003/04 crop year was again marked by substantial volatility, which has become very evident in the crops market over the last number of years. Weather, production and price uncertainty are becoming the norm rather than the exception. This market volatility is an issue which crop farmers must bear in mind in the context of the introduction of decoupled payments in January 2005.

As we have seen in previous years, issues within Ireland and on the international market affected the situation in 2004 and will undoubtedly influence the outlook for 2005. On the domestic front the main issues of concern were weather conditions which provided improved conditions for the sowing of winter crops compared to the previous year, but weather conditions at harvest in 2004 were not as favorable as those recorded in 2003.

On the European front, production levels of feed grains were substantially higher than 2003 levels, primarily due to favourable weather conditions. This increase in supply caused a considerable reduction in prices from their 2003 level.

The issues to be discussed in this paper relate to the situation and outlook for tillage crops in 2004/05. In particular, price developments, crop area, yields and quality, and finally the influence of these developments on the gross margin of individual crop enterprises on Irish farms. In addition, due to the potential magnitude of the impending policy changes in January 2005, an additional impact analysis for cereal farms is outlined. This analysis examines the probability for individual cereal crops that the net margin from producing the crop could be less than the income from the Single Farm Payment (SFP).

Price developments

The cereal price story is significantly different to that of the 2003/04 production year. Compared to Autumn 2003 when there was substantial buoyancy within the cereals sector due to elevated cereal prices, the 2004 harvest has witnessed reduced price levels at farm gate. This price change occurred largely because of the increased levels of grain available in Europe**,** due mainly to higher plantings and especially favourable weather conditions throughout the growing season in Europe. The consequence of these conditions was an increased level of production, particularly in the European feed grains market. The latest figures from Strategie grains (2004) estimate that total EU-25 cereal production for 2004/05 is 284.5 mt, which compares to 229.8mt in 2003/04, representing a 24% increase in production.

[4] The author would like to acknowledge the following people for the prevision of data and comments on an earlier draft of this paper: Gerry Quinlan, Michael Hennessy, Ultan Shanahan and Tony McGarry. All remaining errors and emissions are the responsibility of the author.

As a result, in Ireland in Autumn 2004, the average price paid at farm gate for feed barley at 20 per cent moisture was €96 per tonne, compared with €101 per tonne in 2003 and feed wheat prices in Autumn 2004 were on average €98 per tonne, compared to €111 per tonne last year. The farm gate price for barley did not suffer to the same extent as wheat, mainly due to quality problems associated with the European milling wheat market.

While production levels this year are up on last year, there are a number of issues, which could influence future price developments. European cereal stocks still remain critically low which shifts the focus immediately onto the outlook for the forthcoming year. During the next production year, grain prices will remain sensitive to crop conditions, due to low end of season stocks this year. Bell (2004) warned that '*despite record wheat and coarse grain production in 2004, world stocks have barely recovered, leaving the world's buyers vulnerable for another year to any major crop problems'*. In addition, the re-emergence of China as an importer of grain again puts pressure on world stocks. Together, these developments have resulted for the first time in the development of a forward price for grain in the Irish grain market.

The average price for sugar beet in 2004 is also estimated to be reduced on 2003 levels, as a result of increased yields and reduced sugar content. While signals at the moment indicate that the 2005 sugar campaign is not set to be directly influenced by the impending policy reform, uncertainties within the sector will be evident. The price for main crop potatoes also shifted this year with prices for main crop potatoes also lower than 2003 levels.

National Base Area claim

There was an overshoot of the National Base Area (NBA) claim for arable aid crops in the 2004 production year, for the second consecutive year. This overshoot has implications for the area aid rate payable for all crops. The excess of applications amounted to an overshoot of 1.98%. Consequently, the rate of payment for cereals (including mixtures of cereals, oilseeds, linseed, hemp and flax grown for fibre) in 2004 is reduced from €383.04 (in 2002) to €375.46 per hectare.

Crop area

Estimates of crop area estimated from seed sales are shown in Figure 1 below.

Figure 1: Percentage Change in Crop Area from 2002/03 to 2003/04 crop year
Source: Teagasc (2004a***)***

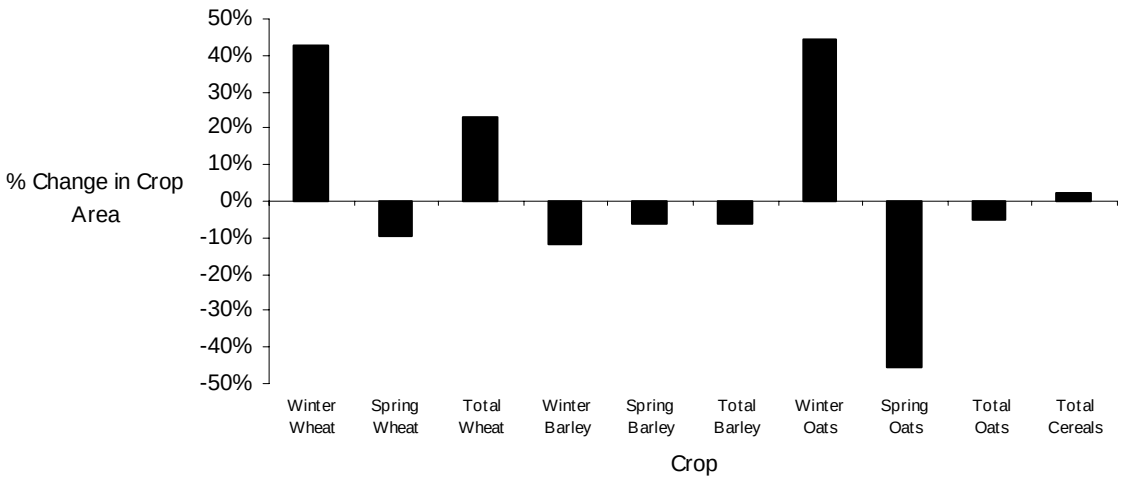

Figure 1 shows that the areas of all winter sown crops increased in the 2003/04 crop year, except winter barley, which has been in decline over the last number of years. Moreover, area of all spring sown cereals was greatly reduced on the previous year. Together, these area changes provide an estimated total cereals area in 2003/04 which is slightly higher than in 2002/03.

Yields and quality

In addition to the increase in cereal area in 2003/04 there was also a substantial increase in average yields. This harvest has produced record yields on many farms. A comparison of estimates of yields for the harvests of 2002, 2003 and 2004 is shown in Table 1. This table shows that the estimated average yield for all cereal crops was substantially higher in 2004 than in the previous two years, except Winter oats which achieved similar yields to last year. Furthermore, the Winter wheat and Spring barley crops yielded exceptionally well this year, with an 18% and 17% increase in yields respectively, over those recorded in 2003.

Table 1: Estimated cereal yields 2002 - 2004 (Tonnes per hectare)

	2002	**2003**	**2004**
Winter barley	6.6	7.7	7.9
Winter oats	7.8	8.1	8.1
Winter wheat	8.8	8.7	10.3
Spring barley	5.3	6.4	7.5
Spring oats	5.9	6.8	7.02
Spring wheat	7.2	7.6	8.4

Source: Teagasc (2004b) & CSO (2004***)***

Overall cereal quality[5] in 2004 was not as good as that recorded in 2003, due mainly to weather conditions during harvest. However, the weather conditions during the 2003 harvest were the best that had been seen in a number of years. In general, however, the quality of the grain in 2004 was still considered very good, with Spring barley, the largest crop, and Winter oats described as 'excellent', with specific hectolitre weights in the low to mid seventies and mid to high fifties respectively. Spring wheat, Spring oats, and Winter barley were all described as 'good' and 'very good'. Finally, Winter wheat quality was considered quite "acceptable", despite some degree of sprouting of the more susceptible varieties (Teagasc, 2004b).

Although the yield and quality of grain was generally the same or better in the 2004 harvest than in 2003, straw yields and quality were lower in 2004. Furthermore, despite the fact that the demand for straw tends to be quite regional, there was a significantly lower demand than last year overall.

In relation to sugar beet, in mid Autumn 2004, estimates indicated that yields were up on 2003, with average yields of 57 tonnes per hectare and average sugar content at 16.4% which could increase before the end of the sugar beet campaign. These yields compare to 48 tonnes per hectare in 2003 (CSO, 2004).

Yield estimates for main crop potatoes, from the Bord Glas/Teagasc sample potato digs, indicate that yields in 2004 are substantially higher than those recorded in 2003.

Cereal production

The production of cereals, shown in Table 2, has been estimated by combining data for yield and area harvested.

Table 2: Estimated cereal production in 2003 and 2004 ('000 tonnes)*

	2003	2004	Change (%)
Wheat	687	1036	+51
Barley	1197	1311	+10
Oats	151	147	-2
Total	2036	2495	+ 23

*Authors' estimates

Table 2 shows that overall cereal production increased substantially in 2004 from its 2003 level. This estimated 23% increase in cereal production resulted from a slight increase in area sown and a substantial increase in average yields.

Gross margins

Trends in gross margins for the main tillage crops between 2003 and 2005 are shown in Table 3. To ensure comparison of 'like with like' all data presented in this table

[5] Cereal quality generally refers to KPH hectolitre weight.

include direct payments and forecasted entitlement values per hectare for cereal crops.

Table 3: Trends in gross margins (including direct payments and forecasted entitlement values) for the main tillage crops 2003 to 2005 (€ per hectare)

	2003 [1]	2004 [2]	2005[3] (@ 90% confidence)		
			Low	Mean	High
Winter wheat	840	922	751	887	991
Winter barley	759	702	642	707	754
Winter oats	620	566	554	603	662
Spring wheat	783	756	563	717	808
Malting barley	689	722	494	633	729
Spring feeding barley	598	638	381	551	652
Spring oats	667	576	538	590	648
Sugar beet	1260	1413	875	1179	1394
Potatoes	2469	2623	1486	3067	4725

[1] National Farm Survey, [2]Estimated, [3]Forecast

Cereal Crops

The estimated gross margins of all major cereal crops (Winter wheat, Malting barely and Spring feed barely), increased in 2004, compared to 2003, which is mainly attributable to an increase in average yields for the aforementioned crops. This increase in gross margin occurred despite a slight increase in costs and a decrease in direct payments and average farm gate cereal prices.

The 'mean' gross margin forecast for all crops for 2005, except Spring wheat, shows the opposite trend in gross margin, as to that witnessed between 2003 and 2004. All major crops that experienced an increase in gross margin between 2003 and 2004, are forecast to experience a decline in gross margin in 2005, over 2004 levels. For example, the gross margin per hectare for Winter wheat is forecast to decrease by 5% and Spring feed barley to decline by 14%. Furthermore, the gross margin for minor crops, such as Spring and Winter oats is forecast to increase by 2% and 6% respectively. However, this forecast for the oats crop is very much dependent on the local domestic demand for oats in 2005, given the projected carry over of stocks from this harvest.

However, each of the forecasts discussed above are point estimates, with which a certain degree of risk is associated. Hence, as introduced last year in the situation and outlook for crops, the gross margin forecasts for the forthcoming year, 2005, again incorporate the reality of risk. The gross margin forecasts for 2005 are presented as a range of possible outcomes rather than point estimates. This method of presenting forecasts reflects the reality whereby risk is part of the decision making process in crop production (see Appendix I for further detail on the importance of risk analysis in crop production).

A 90% confidence interval was placed around the 'mean' point estimates to show with 90% confidence what the gross margin return for each crop is likely to be in 2005, based on historic yield distributions. This exercise identifies the upper and lower bounds of forecast gross margins, which provides additional information to the 'mean' forecasts discussed above.

The assumptions for the 2005 forecasts are that yields similar to the historic distribution of yields could occur and cereal prices increase in line with forward buying prices recorded in the press in recent weeks. Seed costs are projected based on relative changes in the price of output and all other cost items were projected to rise at the projected rate of inflation.

Other Crops

Sugar beet gross margin in 2004 is estimated to increase by greater than 10% as a result of an estimated 15% increase in average yields. As a result of the increase in average yields, the average price is estimated to be somewhat reduced on the 2004 level. In terms of the forecast for 2005, based on a return to average yields and sugar content, the 'mean' gross margin forecast is expected to be lower than that recorded in 2003 and 2004.

The gross margin for potatoes is included in this analysis but is always subject to great uncertainty when expressed on a calendar year basis as the potato harvest is spread from Autumn in one year to early Spring in the next. In 2004 the gross margin for potatoes is estimated to be slightly increased on 2003 levels, which was calculated based on a substantial increase in average yields and a decrease in prices.

For 2005, the gross margin is forecast with 90% confidence to be within the range €1486 and €4725. This range of estimates shows that potato production is by far the crop with which most risk is associated, amongst the crops examined, in terms of gross margin volatility from one year to the next. However, based on the historical distribution of potato yields and prices, there is a 73% probability that the gross margin in 2005 will be greater than that received in 2003 and 2004. The 'mean' gross margin forecast for 2005 is €3067, which represents a 17% increase on 2004 estimates. Interestingly, this forecast is based on a reduction in yields from that recorded in 2003 and 2004, and a subsequent increase in average farm gate prices. This correlation is based on the historic distribution of farm gate prices and production levels. This relationship was examined using an Ordinary Least Square (OLS) regression function which showed that if the area of potatoes decreases by 1,000 hectares a consequent increase in price per tonne of €6.50 could be expected. Furthermore, a one tonne per hectare increase in yields is estimated to result in a reduction in potato prices per tonne of around €6. This result shows that as a result of an increase in production levels in recent years, the marginal return per hectare has declined. Therefore, it is forecasted that with a maintenance of the area planted in 2004 and return to average yields, and a consequent increase in price levels in 2005, there is a high probability that gross margin would increase.

The SFP and returns to production

Given that the implementation of decoupled SFP in January 2005 is considered the biggest single change to the Common Agricultural Policy (CAP) since its inception, an additional impact analysis on the returns to production for tillage farming was conducted. Table 4 below shows the forecast gross and net margin for each of the main cereal crops in 2005 excluding entitlement values per hectare. In addition, a further analysis was carried out which examined the probability that average net margins per hectare would be lower than entitlement values per hectare minus compliance costs, given the yield variability that can occur in any given year (Table 5). Furthermore, given the significant potential for variation in net margins between individual farms, associated with yield differences, a distinction was made between individual farms on the basis of yields returned.

Table 4 Gross & net margins (excluding entitlement values) for the main tillage crops 2005 (€ per hectare)

	2005 Gross Margin minus SFP	**2005 Net Margin minus SFP**
Winter wheat	549	146
Winter barley	336	11.6
Winter oats	262	-46
Spring wheat	381	42
Malting barley	287	25
Spring feed barley	208	-32
Spring oats	271	-10

Table 4 shows that for the average producer of cereal crops the forecast gross margin for 2005 for all crops is positive. Winter wheat is forecast to have the highest gross margin including and excluding direct payments. This finding is not surprising given that cereal direct payments were partially decoupled from production under Agenda 2000, which results in similar relativity between crops post decoupling as to that which existed previously.

The net margins shown in Table 4 show that not all crops are forecast to have a positive net margin post decoupling. However, it is important to remember that a significant portion of fixed costs on farms will remain a feature of production in the short to medium term. Hence, the significance of net margin data for the purpose of short to medium term planning is limited.

In the context of decoupled payments the role of risk in decision making becomes increasingly important. The average figures in Table 4 above are based on the assumption that average yields are achieved in 2005. However, deviations from average yields in the era of decoupled payments have the potential to impact significantly on net farm income. Hence, Table 5 below shows the probability that the net margin associated with cereal production is less than or greater than the income from the SFP per hectare, given the historic distribution of yields that has occurred over the past number of years.

Table 5 Probability estimates for net margins from cereal production versus 'entitlement farming'[6] (2005)

	Average producer			Less efficient producers (Bottom 1/3 of producers)		
	< SFP Income	€25 per hectare > than SFP income	> SFP Income	< SFP Income	€25 per hectare > than SFP income	> SFP Income
Winter wheat			100%	-	-	100%
Winter barley			100%	-	-	100%
Winter oats	15%	10%	75%	34%	9%	57%
Spring wheat			100%	-	10%	90%
Malting barley			100%	6%	11%	83%
Spring feed barley		6%	94%	46%	9%	45%
Spring oats	14%	3%	83%	73%	13%	14%

Table 5 shows that there is a high probability that the returns from cereal production in 2005, for the average producer, will be higher than the returns from 'entitlement farming' alone. For example, the average spring barley producer who achieved an average yield of 7.5 tonnes per hectare in 2004, has a 94% probability that the returns from growing the crop in 2005 would be higher than the 'entitlement farming' option. This result is based on the assumption that prices are higher in 2005 than 2004, and any yield distribution that was achieved over the last number of years is likely to occur again.

However, the situation is not as promising for the less efficient producers identified in the sample. For example, a spring barley producer who is less efficient than the average, with yields of 5.6 tonnes per hectare in 2004, has only a 45% probability that the returns from the crop in 2005 would be higher than the 'entitlement farming' option. Furthermore, there is a 46% probability that the returns from growing the crop would be lower than the 'entitlement farming' option and a 9% probability that the margin over 'entitlement farming' would be as low as €25 per hectare. Hence, given that Spring barley is the most significant crop in the Irish cereals sector this finding could have significant implications for average net farm income. Other crops in 2005, for the less efficient producers, that are forecasted with a high probability to yield relatively lower returns per hectare from growing the crop compared to the 'entitlement farming' option are Winter and Spring oats.

There is a high probability for the less technically efficient producers that growing the crop in the coming year could actually return a lower net farm income compared to the situation of not growing the crop. This provides a basis for these group of producers to look at alternative farm profiles. Possible alternatives, in addition to 'entitlement farming', could include consolidation of entitlements or switching of cereal enterprise to less risky

[6] Entitlement farming is assumed to represent the farming situation whereby the land is used only to activate and draw down the SFP. No cereal crops are grown on the farm and the land is maintained in good agri - environmental condition.

crops. However, the risk profile of the identified less efficient producers may not always be simply addressed by planting crops such as Winter wheat and barley, which were identified in Table 5 as ‘less risky crops’. This ‘warning signal’ is based on the assumption that winter cereal crops require higher husbandry skills compared to other spring crops such as spring barley. As such, less technically efficient producers of crops such as spring barley would be expected to experience significant efficiency deficits in the production of winter crops

Conclusions

The 2003/04 production year has again shown that risk and market volatility is an important consideration in the crops sector. Farm gate prices for all crops were lower in 2004 compared to 2003.However, yields for all cereal crops, sugar beet and potatoes were significantly higher in 2004 compared to the previous harvest. As a result the gross margin for all major cereal crops, is estimated to be higher in 2004 compared to margins in 2003. However, the margins for other minor cereal crops are estimated to be lower in 2004 compared to last year, mainly due to reduced farm gate prices. The gross margins for sugar beet and potatoes are also estimated to be higher in 2004 than 2003.

The outlook for the forthcoming year will be very much dependent on weather and production patterns over the coming months. However, the emergence of forward buying prices in the cereals market in Ireland must be considered as a positive way in which a certain element of market volatility can be controlled. With a return to normal yields in 2005, coupled with an increase in farm gate cereal prices, the forecast for the coming year is for a reduction in gross margin for the major cereal crops and an increase in gross margin for the minor cereal crops such as Winter oats and Spring oats. In addition, assuming a return to normal yields the forecast for sugar beet is a reduction in gross margin, and for potatoes an increase in gross margin.

It is important to remember, especially in the context of decoupled payments, that any yield variation from the *average* estimates used in the above forecasts could have a significant impact on net farm income. Hence, the probability forecasts used to project the impact of yield variations used in this analysis should be considered important, especially for the less technically efficient producers. This research has shown that alternative farm profiles should be considered by the risk averse producer who has struggled to maintain average yields in the past number of years.

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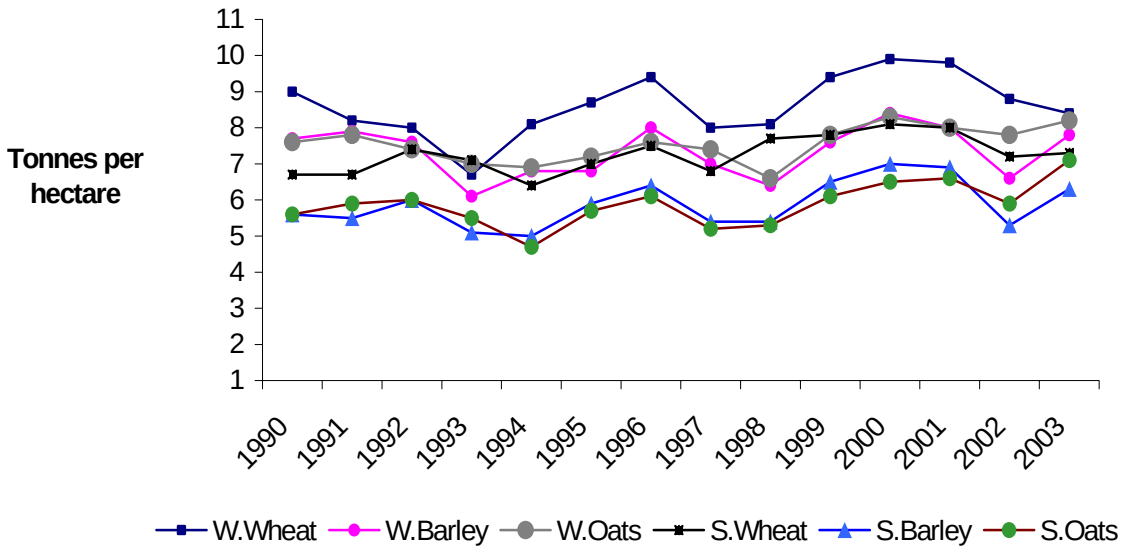
Appendix I

The Importance of risk in Crop Production

The risk associated with the variation in cereal yields from year to year is likely to become more of an issue for cereal farmers, due to changes resulting from the Luxembourg Agreement of the Mid Term Review of the Common Agricultural Policy (CAP). These reforms will lead to the decoupling of direct payments from production. As a result, production decisions will be solely based on the profitability of crop production rather than the profitability of the crop plus the direct payment. In this event variability of yields from year to year will have more of an influence on the production decisions of farmers. Figure 1A below shows the variability of crop yields from 1990 to 2003.

Figure 1A: Cereal Yields (1990 – 2003, yields per hectare)



Source: Central Statistics Office (various years) and Teagasc Harvest Report (2003)

Figure 1A shows that yields are quite volatile from year to year. A trend regression line was fitted to each of these crop yields. For the most part these results showed that there was very little relationship between time and yield and the relationship was not significant in most of the crops[7]. These results indicate that there is a relatively large element of risk associated with crop production, which cannot be controlled by the producer.

[7] The average r^2 value for the cereal crops examined was .23, which indicates that 23% of the variation in cereal yields is associated with trend and the other 77% of variation is not explained by trend.

THE SITUATION AND OUTLOOK FOR SHEEP 2004/05

A. Kinsella & L. Connolly

Introduction

The analysis in this paper spans two quite differing agricultural policy regimes in the sheep sector. Ewe and rural world premium payments continue for 2004, while the implementation of decoupling in 2005 will begin a period of immense change within the agricultural sector. In previous years the main analysis related to the overall margins for the sheep enterprise. Owing to the introduction of this additional variable 'decoupling' into the equation in 2005 it was decided to extend the analysis as put forth in previous years so that comparisons can be made between years. Therefore, in forecasting results for 2005 the 'direct payments' element has been retained as part of the gross output figure but with special emphasis now being placed on the market based components.

Data from farms with sheep enterprise recorded in the Teagasc National Farm Survey (NFS) were used as the basis for analysis in this paper. Estimates for 2004 and forecasts for 2005 are calculated based on previous years sheep enterprise NFS data, applying change co-efficients and price indices and input from sheep specialists.

Sheepmeat Market

The EU Sheepmeat Forecasting Group have predicted that the EU sheep market is expected to remain stable in 2004/05. Sheepmeat production is forecast to increase by under one per cent to reach 1.03 million tonnes, while consumption is expected to remain static at approximately 1.28 million tonnes. EU self-sufficiency therefore is forecast to remain at just above 80 per cent resulting in an import requirement of approximately 250,000 tonnes. The EU Forecasting Group have forecast rises in sheepmeat production in 2004 in Ireland and Spain of 6 per cent and 2 per cent respectively. New Zealand exports of sheepmeat to the EU in the first eight months of 2004 were 5 per cent lower than for the similar period in 2003.

The forecast for the medium to long term is that EU sheep production will decline, whilst demand remains strong resulting in a positive outlook for the EU sheepmeat sector. Self-sufficiency in EU sheepmeat is likely to decline, which should impact positively on Irish sheep producers both on the domestic and export market. Sheepmeat prices should remain firm and the price differentials with competing meats should be maintained.

UK sheepmeat production is forecast by MLC[8] to remain stable in 2004, while imports are expected to increase by 2 per cent on 2003 levels. Exports from UK are forecast to remain static at 77,000 tonnes in 2004. Consumption in the UK is forecast to increase by 10,000 tonnes supplied mainly by higher imports. The UK continues to be the main

[8] Meat and Livestock Commission, Sheep Economics Market Outlook, various issues 2004

destination for New Zealand lamb accounting for almost half the total in 2004, an increase of 5 per cent on 2003.
French production is forecast to decline again in 2004 (-2%), as is consumption of sheepmeat. Supplies of sheepmeat to France from New Zealand and Australia are also likely to decline in 2004.

Quotas for sheepmeat agreed under the current WTO agreement with Australia and New Zealand will have a major impact on both supply and price levels. Recent sheep industry projections by the Australian meat industry forecast an increase in sheepmeat production of over 37 per cent by late 2008.

In Ireland lamb disposals have been higher in 2004 than in 2003 viz 2.309 million head up to end of October 2004 compared to 2.062 million for the same date in 2003, an increase of 12 per cent. Cull ewe slaughterings up to late October 2004 were 376,646 head compared to 321,612 in 2003 – an increase of 17 per cent. Live exports also increased in 2004 by almost 40,000 head, these being mainly breeding ewes. This has resulted in almost 100,000 extra breeding ewes gone out of the system in 2004 compared to 2003. In addition to this higher disposals of mid-season ewe lambs will result in lower carry over of ewe lambs and hoggets to spring of 2005. The data from the meat export plants and live exports therefore suggest a sizeable reduction in the ewe breeding flock and lamb crop for the 2004/05 production year. Decoupling is a major contributory factor especially in hill flocks. It is also likely that there will be considerable decline in flock numbers.

Lamb slaughterings also increased to early November 2004. There are a number of reasons for this – the main ones being that 2004 was a relatively good grass producing year compared to 2003 and secondly sheep producers fed more concentrates. However, the higher kill in mid to late 2004 will result in fewer lambs for slaughter in the last two months and also a much smaller carry over to spring of 2005 compared to 2004. This should mean favourable prices for finished store lambs and the early lamb crop of 2005.

Lamb prices to early November 2004 were 1.6% down on the same period in 2003. On a seasonal basis prices were up 3% in the first quarter of 2004, followed by a decline of 3 per cent for early lamb, with average prices for mid-season lamb virtually static.

Sheep and Flock Numbers

Table 4.1: Ewe and flock numbers 1993 – 2004, based on ewe premium applications

	Applicants claimed	Ewes claimed ('000)
1993	52,955	5,338
1998	44,583	4,889
1999	43,707	4,762
2000	41,177	4,499
2001	38,632	4,262
2002	36,089	3,887
2003	34,910	3,891
2004	34,821	3,936

Source*:* Department of Agriculture and Food

Sheep flock and ewe numbers shown in Table 4.1 are based on applications for payment of ewe premium. The trend in the number of sheep flocks which has been in decline since 1993 continued in 2004 with a fall to 34,821 flocks. Ewe numbers seem to have bottomed out with a small increase in 2004. Average flock size continues to change with 113 ewes in 2004 compared to 100 in 1993. Of the 35,000 sheep flocks in the country, approximately 13,000 or 37% have under 50 ewes. Many of these small flocks are managed by elderly or part-time farmers and the likelihood is that these will exit from sheep production post decoupling of direct payments in 2005.

Sheep Margins

The ewe premium and rural world premium have been fixed at €21 and €7 respectively since 2002. In addition €1.26 extra to be paid per ewe from the National Envelope in 2004. Gross margin data for the main sheep system are shown in Table 4.2. All per ewe data are based on per ewe joined except for Hill-Blackface, where it refers to per ewe claimed for premium.

Table 4.2: Gross margin (€/ewe), 2002 – 2005

	2002	2003	2004[1]	2005[2]	2005[3]
Early Lamb	71	83	78	56	*(82)*
Mid-season lamb	75	73	71	47	(72)
Hill-Blackface	40	34	32	3	(32)

Source*:* Teagasc National Farm Survey
[1]Estimate, [2]Forecast, [3] 'Old basis' forecast including direct payments

Actual margins are presented for 2002 and 2003 with estimates for 2004 and forecasts for 2005. The lowland systems are based on National Farm Survey data from flocks on better soils with a wide use range.

Margins for the early lamb system increased in 2003 but are estimated to have declined in 2004. This is due to higher production costs and a 3 per cent decline in lamb prices in the April to May period compared to 2003. However, the outlook for 2005 is positive due to the large volume of lamb disposals in 2004. Mid-season is the predominant lowland system and margins for this system are shown to be relatively static from 2002 to 2005. Gross margin per ewe is estimated to have declined slightly in 2004 due to the higher volume of concentrates fed and static lamb prices. The fixing of the ewe premium has resulted in more stability in sheep margins. The year 2004 was a good grass growing year, which aided earlier disposals of lamb.

In 2005 the ewe premia will be decoupled and this will have a dramatic impact on the gross margin per ewe and results in a reduction of approximately €25[9] per ewe on lowland system and €29[10] for blackface system. Direct payments per ewe for the lowland systems formed one-third of gross profit for 2004. The estimated overhead costs per ewe in 2003 were €36.30 for mid-season lamb resulting in a net margin of €36.20 per ewe. Direct payments therefore contributed 70 per cent to net margin for main lowland system.

The actual gross margin for Blackface Mountain system in 2003 was €34 per ewe and 2004 was very similar at €32. Direct payments per Blackface Mountain ewe were €29.40, which means that this system has a positive "market based" gross margin of €3 i.e. market output from sales was just about sufficient to cover production costs. Overhead costs for this system were estimated at €14 per ewe in 2003 resulting in a net margin of €20 per ewe compared to a direct payment of €29 per ewe i.e. €9 per ewe of the direct payment was used to cover production costs. It is not difficult therefore to forecast a major decline in ewe numbers in this system following full decoupling with a gross margin per ewe of €3.

The trend for output, cost and gross margins per ha for the main lowland system is shown in Table 4.3 for farms on the better soils.

Table 4.3: Trend in output, costs and margins (€/ha), mid-season lamb, 2003 –2005

	2003	**2004[1]**	**2005[3]**
Gross output	980	986	1008
Direct costs	334	354	364
Gross margin	646	632	644
Overhead costs	323	330	330
Net margin	323	302	314

Source: Teagasc National Farm Survey
[1] Estimate, [3] 'Old basis' forecast including direct payments

Both gross and net margins are estimated to decline in the current year and increase slightly in 2005 but still remain below 2002 margins. It should be noted that, for

[9] Average direct payments per ewe for lowland system , National Farm Survey data 2003
[10] Average direct payments per ewe for blackface system , National Farm Survey data 2003

comparison purposes, direct payments are included in output for all years in Table 4.3. In 2005 direct payments will be decoupled and therefore will be excluded from output in the coming year.

Table 4.4: Trend in output, costs and margins (€/ewe), mid-season lamb, 2002- 2003

	2002	**2003**
Gross output	110	110
- Direct Payments	25	25
Market Output	**85**	**85**
Concentrates	14.7	16.3
Winter forage	3.8	3.2
Pasture costs	6.6	7.0
Other direct costs	9.9	11.5
Direct Costs	35	38
Gross Margin	75	73
Market based Gross Margin	**50**	**48**
Overhead costs	37	36
Net Margin	38	36
Market based Net Margin	**13**	**11**

Source: National Farm Survey (NFS), Teagasc

The trend in output, costs and margins per ewe are detailed in Table 4.4 for mid-season lamb. Although gross output and market output remained similar for 2002 and 2003 there was however an increase of 9% in direct costs. The main element contributing 11% to this change was concentrates, increasing from €14.7 to €16.3 ewe. Another contributing factor was 'other' direct costs, which includes livestock expenses, casual labour, transport and other miscellaneous direct costs. These contributed 16% to the overall change in direct costs.

As a result of increased costs the gross margin fell from €75 to €73 between 2002 and 2003. Overhead costs declined by 3%, so resulting in an overall decline in net margin of 5%. The market based net margin declined from €13 to €11, a 15% decline. This is quite a significant decrease, particularly in light of the new policy regime of decoupled payments which will come into effect from 2005 onwards. Overhead costs per ewe have already been reduced between the two years, from €37 to €36 but further emphasis will need to be placed on managing the overall production cost elements.

Summary

The EU Forecasting Group have forecast rises in sheepmeat production in Ireland in 2004 of 6 per cent. Self-sufficiency in EU sheepmeat is likely to decline. This should impact positively on Irish sheep producers both on the domestic and export market.

Sheepmeat prices should remain firm and the price differentials with competing meats should be maintained.

In Ireland lamb disposals have been higher in 2004 than in 2003, an increase of 12 per cent (up to end of October 2004). Cull ewe slaughterings up to late October 2004 were 376,646 head compared to 321,612 in 2003 – an increase of 17 per cent.

The data from the meat export plants and live exports suggest a sizeable reduction in the ewe breeding flock and lamb crop for the 2004/05 production year. Considerable decline in flock numbers is also likely. Favourable prices for finished store lambs and the early lamb crop of 2005 will result from the much smaller carry over to spring 2005 compared to 2004, especially as only 18% of slaughtering in Ireland occur in the first quarter[11]. The influence of the home market is also increasing with one out of every three lambs being exported.

The downward trend in the number of sheep flocks since 1993 continued in 2004. Ewe numbers appear to have bottomed out with a small increase in 2004. Average flock size continues to change with 113 ewes in 2004 compared to 100 in 1993. Thirty seven per cent of the 35,000 sheep flocks have under 50 ewes.

Margins for the early fat lamb system increased in 2003 but are estimated to have declined in 2004 due to higher production costs and a 3 per cent decline in lamb prices in the April to May period compared to 2003. The outlook for the early fat lamb system in 2005 is positive due to large volume of lamb disposals in 2004.

Margins for the mid-season system, the predominant lowland system, are shown to be relatively static from 2002 to 2004 with decline in 2005 following decoupling. Gross margin per ewe is estimated to have declined slightly in 2004 due to higher volume of concentrates fed and static lamb prices. The fixing of the ewe premium has resulted in more stability in sheep margins for the mid-season system.

Direct payments per ewe averaged €25 for the lowland systems and formed one-third of gross profit. The estimated overhead costs per ewe in 2003 were €36.3 for mid-season lamb resulting in a net margin of €36.2 per ewe. Direct payments therefore contributed 70 per cent to net margin for main lowland system.

The actual gross margin for blackface mountain system in 2003 was €34 per ewe and 2004 was very similar at €32. Direct payments per blackface mountain ewe were €29.4, which means that this system has a positive “market based” gross margin i.e. market output from sales was just about sufficient to cover production costs. Overhead costs for this system were estimated at €14 per ewe in 2003 resulting in a net margin of €20 per ewe compared to a direct payment of €29 per ewe i.e. €9 per ewe of the direct payment was used to cover production costs. Based on these figures the forecast is a major decline in ewe numbers in this system following full decoupling.

[11] Bord Bia, 2003

For mid-season lamb both gross and net margins are estimated to decline in the current year, but still remain below 2002 margins. Between 2002 and 2003 mid-season lamb gross output and market output remained similar but there was an increase of 9% in direct costs. Gross margin fell from €75 to €73 between 2002 and 2003. As a result of increased costs the overhead costs declined by 3%, so resulting in an overall decline in net margin of 5%.

Acknowledgements

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SITUATION AND OUTLOOK CONFERENCE 2004

PIGS AND MEAT

Michael A. Martin, Chief Pig Advisor, Athenry

Pig production has been reasonably profitable in 2004. Despite high feed prices until the harvest, profitability was achieved through improved pig prices.

Feed prices in 2005 are likely to be significantly lower than for 2004. Sow numbers throughout the EU and in Ireland are declining. A reduction in pig supplies allied to lower feed costs suggest reasonable returns for 2005.

Pig Breeding Herd

EU

There is only one common period for pig population surveys across the EU – November/December. The member states must survey their pig populations at least twice each year, with no more than 6 months between survey dates.

Table 1 Sow numbers in EU-15 member countries Nov/Dec. 2003

Country	Sow* Numbers (000)	%
Spain	2575	21.2
Germany	2564	21.1
Denmark	1377	11.3
France	1328	10.9
Netherlands	1052	8.6
Italy	736	6.0
Belgium	618	5.1
UK	564	4.6
Austria	324	2.7
Portugal	311	2.6
Sweden	204	1.7
Finland	187	1.5
Ireland	176	1.4
Greece	143	1.2
Luxembourg	8	0.1
Total	12167	100

* Includes gilts not yet served.

The numbers for 2003 (12.167m) were 2% lower than for 2002 ((12.413m).

Of the EU Accession States, Poland has a very large sow herd (1.705m) and ranks third after Spain and Germany in the EU-25.

Based on December 2003 data the Accession States will increase the EU sow herd by 24.2% to 15.114m.

Table 2 Sow numbers in EU Accession States December 2003

Country	Sows Numbers (000)	% Total
Poland	1705	57.8
Hungary	422	14.3
Czech Republic	371	12.6
Slovakia	144	4.9
Lithuania	94	3.2
Slovenia	62	2.1
Cyprus	56	1.9
Latvia	49	1.7
Estonia	36	1.2
Malta	8	0.3
	2947	100

Trends in sow numbers for the main EU pig producing countries are shown in Table 3.

Table 3 Changes in sow numbers in selected EU countries

Country	Dec. 2003/2002	Latest Available Data	
	Change	Date (2004)	Change %
Spain	-1.6		
Germany	+1.1	May	-2.8
Poland	-6.4		
Denmark	0	Oct.	-1.8
France	-2.4		
Netherlands	-7.7	May	-1.7
Italy	-2.0		

UK

The UK sow herd has continued to decline. In June 2004, the herd (sows and in-pig gilts) had declined to 498,000. This is down from about 800,000 in the mid 1990's. The decline 2004/2003 was 3.5% following a decline of 7.5% for 2003/2002. There are no firm indications that this trend will be reversed in the near future.

Ireland

The most recent pig enumeration (June 2004) shows a sow herd (sows and in-pig gilts) of 150,400 – down 2.5% on the year before. This continues the downward trend in the breeding herd since 1998.

Table 4 Sow Numbers in the Republic of Ireland 1998 – 2004 June Enumeration

Year	Sows + Served Gilts (000)
1998	175.1
1999	171.6
2000	159.2
2001	163.4
2002	160.6
2003	154.3
2004	150.4

Source: *CSO*

Northern Ireland

In June 2004 the sow herd was reported at 37,400 – down 13% on 2003 (Table 5).

Table 5 Trends in sow numbers in Northern Ireland 1998 – 2004 June Enumeration

Year	Sows + Served Gilts (000)
1998	66.9
1999	47.1
2000	41.8
2001	40.7
2002	39.3
2003	42.9
2004	37.4

Source: *DARDNI*

If these trends are confirmed a significant reduction in pig supplies from Northern Ireland and the Republic can be anticipated for 2005.

Table 6 Trends in sow numbers in Ireland (South and North) 1998 – 2004 June Enumeration

Year	Sows + Served Gilts (000)
1998	242
1999	219
2000	201
2001	204
2002	200
2003	197
2004	188

Pig Slaughterings

Ireland

There has been a significant reduction in pig slaughterings in 2004 compared to 2003 in both the Republic and Northern Ireland.

Table 7 Pig slaughterings in licensed export premises Jan. – Oct.: 44 weeks (millions)

	Republic	Northern Ireland	Total
2003	2.417	1.130	3.547
2004	2.252	1.086	3.338
Change %	-6.8	-3.9	-5.9

Pig disposals in the Republic consist of slaughterings and live exports. Live exports are mainly of pigs for slaughter in Northern Ireland.

Table 8 Average weekly pig disposals in the Republic of Ireland (2000-4)

Year	Slaughterings		Live Exports	Total
	Licenced Export	Other		
2000	58615	1897	4556	65068
2001	61480	1200	1206	63886
2002	58388	1300	7084	66772
2003	54508	1200*	9020	62728
2004 (9m)	51056	1200*	8966	61222

* Estimate

Live exports now represent about 14% of total production.

The decline in pig slaughterings in the Republic is due to

- a decline in the sow breeding herd
- increased losses due to the spread of Post-Weaning Multi-Systemic Wasting Syndrome (PMWS)
- more units being destocked and repopulated to improve herd health status leading to a temporary interruption in supplies.

The decline in slaughterings has been partially offset by a steady increase in average pig slaughter weight (Table 9).

Table 9 Pig slaughter weights and lean meat percentage (Main plants only) 1999 – 2003

Year	Slaughter Weight kg	Lean Meat %
1999	70.3	57.2
2000	71.3	57.4
2001	72.9	58.3
2002	72.3	58.3
2003	73.0	58.4

Source: Department of Agriculture and Food

A significant increase in average slaughter weight for 2004 can be expected.

Output Per Sow

The number of pigs produced per sow per year in herds participating in the Teagasc Pigsys recording system averaged 21.7 over the 4 year period 2000 – 2003 (Table 10).

Table 10 Number of pigs produced per sow per year in recorded herds 2000 – 2003

Year	Number of Pigs Produced Per Sow Per Year
2000	21.6
2001	21.4
2002	21.9
2003	21.8
Average	21.7

Source: Pigsys Report 2003

Total pig disposals for the Republic consist of slaughterings and live exports. In this 4 year period pig disposals averaged 3.386m per year (Table 11).

Table 11 Total pig disposals 2000 – 2003 and sow herd size 1999 – 2002

Year	Pig Disposals (m)	Year	Sow Herd (000) June
2000	3.383	1999	171.6
2001	3.322	2000	159.2
2002	3.473	2001	163.4
2003	3.366	2002	160.4
Average	3.386	Average	163.7

Source: Dept. of Agriculture and Food and CSO

The average number of pigs sold per sow per year works out at 20.68 – considerably below the average of 21.7 found in recorded herds. Sow output in Pigsys recorded herds appears to be 1.5 pigs per sow per year higher than in herds not using the system.

Pig disposals of 61,222 per week for the first 9 months of 2004 represent 20.63 pigs per sow per year on a herd of 154,300 sows at June 2003.

The available data indicates that sow output on Irish pig units is less than previously reported. This has serious implications for the competitiveness of the Irish pig industry.

Pig Feed Costs

Pig feed prices increased steadily from October 2003. The average composite meal price rose from €214.90 in Sept. 2003 to a peak of €243.80 in July 2004. This increase was due to the perceived world-wide shortage of the main feed ingredients, cereals and soyabean meal, after the 2003 harvest. As a result, the Feed Cost per kg Deadweight increased from 82c to 89c.

The average composite feed price for Jan. – Oct. 2004 was €228.70 per tonne.

Table 12 Trend in pig feed prices in Ireland 2000 - 2004

Year	Average Composite Feed Price € per tonne
2000	207.2
2001	219.8
2002	220.1
2003	216.7
2004 (Jan. – Oct.)	228.7

Source: Teagasc National Monitoring of Prices and Margins

Feed prices for October 2004 have fallen to €215.30 per tonne following the 2004 harvest. Feed cost per kg is currently estimated to be about 82c.

Pig Prices

The average price per kg deadweight in 2004 is likely to be 137c. This is a substantial 11c increase on the 2003 average of 126c.

Table 13 Trends in finisher pig price c per kg dead 2000 – 2004

Year	Average Price Per Kg Dead c
2000	129.5
2001	148.3
2002	130
2003	126
2004 (proj)	137

Source: Teagasc: National Monitoring of Prices and Margins in Pig Production

The average pig price in Ireland in 2004 has been 97% of the EU average.

Table 14 Pig Prices in EU and selected EU member states 2004 Jan. – Sept.

	c per kg dead	% of EU average
EU	136.7	
Ireland	132.5	97
UK	155.1	113
Denmark	118.7	87
Netherlands	129.1	94
France	129.3	95
Germany	142.7	104
Spain	142.6	104

The high price in the UK (155.1c per kg) is reflected in a higher price reported for Northern Ireland (138.2c per kg) compared to the Republic (132.5c).

Danish prices in 2004 have been particularly low at 118.7c per kg or 87% of EU average. This price does not include the end of year bonus of about 7.5c per kg.

Gross Margins

Gross Margins deteriorated in 2003 compared to 2002 due to lower pig prices and higher feed prices. Margin over Feed declined from 49 to 43c per kg deadweight. For 2004 (January to October) this has improved to 50c and is likely to exceed 51c for the full year. The Gross Margin per Sow on integrated units will exceed €600 for 2004

Table 15 Gross Margin per Sow on Integrated units : 1999-2005

Year	Gross Margin €
1999	189
2000	543
2001	775
2002	522
2003	464
2004(est.)	607
2005 (proj.)	720

With good pig price prospects and lower feed costs Gross Margins in 2005 are expected to improve.

Pig Supply Prospects

Sow numbers in the Republic of Ireland are likely to decline further. The factors likely to contribute to this decline include,

(a) the legal requirement that sow tethers no longer be used after December 2005. Pig producers who can convert tether systems to stalls with minimum

cost and disruption will have done or will do so. Where this is not feasible and extra housing is required producers could well reduce herd size if there are major difficulties in obtaining planning permission for new buildings. The recently announced grant scheme is expected to be of assistance

(b) the Nitrates Action Plan will place extra costs and an administration burden on producers in obtaining suitable land for spreading pig manure. The Organic Nitrogen output is 67 kg per sow and progeny per year

(c) the introduction of Integrated Pollution Prevention and Control (IPPC) licensing will lower the thresholds above which a licence will be required. The thresholds are,

285 places for sows on integrated units
750 places for sows on breeding units
2000 places for production pigs over 30 kg.

The cost of preparing a licence application to the Environmental Protection Agency will encourage some producers to reduce their herd to below these thresholds.

(d) ongoing uncertainty in relation to the requirements attached to IPC/IPPC licences

(e) insufficient numbers of young people entering the sector as owners, managers or stockpersons at present resulting in an older age profile

(f) concerns in relation to pig slaughtering capacity and access to pig slaughtering facilities on the island. The closure of the Galtee plant in Mitchelstown has reduced capacity by at least 9,000 and up to 12,000 pigs per week. This has been offset by increased throughput at other plants on the island.

The anticipated decline in sow numbers is likely to be partially offset by an increase in pig slaughter weights. However, there may be limited scope to do this in view of concerns about the possible presence of boar taint in at least some carcasses from male pigs over 80 – 85 kg deadweight.

Pigmeat Imports

Imports of pigmeat into Ireland in 2003 amounted to 47,785t – an increase of 10% on 2002. Britain supplied 33.4% of pigmeat imports (15944 tonnes) and 8.2% (3923 tonnes) came from Northern Ireland.

Imports are mainly required to make up for a deficit of backs and loins on the Irish market. A substantial amount of imported pigmeat is processed here and then re-exported.

Pigmeat Exports

Total pigmeat exports in 2003 amounted to 120,220 tonnes. Exports to the UK represents 50% of these exports. A further 25% was exported to international markets outside the EU.

Pigmeat exports have been declining (Table 16)

Table 16 Pigmeat exports from Ireland: 1999 – 2003 ('000 tonnes pw)

Year	Quantity
1999	135
2000	129
2001	136
2002	123
2003	120

Source: Bord Bia

Pigmeat Consumption

Per capita consumption of pigmeat was 38.3kg in 2002. This was a decline of 1 kg on 2001. Total pigmeat consumption is about 147,000 tonnes cwe per year.

Table 17 Pigmeat supply balance: 2003 tonnes cwe (est).

Production	253
Exports - meat	120
- live	34
Imports	48
Consumption	147

Pigmeat consumption per capita was 41% of total meat consumption in 2002.

Table 18 Meat consumption per capita 2002

Meat	Kg per head	% of total
Pigmeat	38.3	41
Poultry	30.5	33
Beef	17.5	19
Sheep	5.2	6
Other	1.6	2
Total	93.1	100

Source: Central Statistics Office

Non-Feed Costs

The average non-feed cost per kg deadweight on Pigsys recorded herds in 2003 was 42c. This includes interest on borrowings and building depreciation. This is an increase of 9% on 2002. Labour/management and manure costs were the main contributors to this increase.

At current feed prices and a feed cost of 82c per kg well-run efficient units need at least 124c per kg to cover production costs i.e. before there is any return on investment.

Non-feed costs are likely to increase ahead of inflation. Specifically increased costs will include,

- labour/management: due to on-going shortage of skilled personnel
- manure: due to restrictions on manure spreading and the proposed Nitrates Action Plan
- environment: as more units become liable for licensing, application and compliance costs will increase
- heat, power and light: energy costs have been increasing significantly
- repairs: with better returns expenditure on maintenance will tend to increase to upgrade facilities
- interest: capital expenditure to have units comply with welfare legislation.

Summary

Pig production in 2004 has been quite profitable despite high feed prices until September. Sow numbers are declining throughout the EU and in Ireland. Pig supplies are likely to be reduced in 2005 which should ensure reasonable pig prices. Feed costs for 2005 are likely to be well below 2004 levels. However, non-feed costs are likely to increase significantly.

There are significant challenges facing the pig industry if the decline in sow numbers is to be arrested. The pig sector is still a very important part of the overall agricultural economy.

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