Situation and Outlook in Agriculture 2003/04

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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 2002 in current and real terms (base 1995 = 100)

Table 1.1: Aggregate income in Agriculture 1995 - 2002

	Agriculture Income current €m	Agriculture Income Real €1995 = 100
1995	2,597	2,597
1996	2,758	2,711
1997	2,566	2,487
1998	2,563	2,427
1999	2,303	2,145
2000	2,535	2,235
2001	2,697	2,267
2002	2,480	1,993

Source: CSO

The data shows that income arising in agriculture has declined by 5% in current terms but by 23% in real terms when inflation is taken into account.

Farmers plans for 2003

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 single visit questionnaire. In 2003 the survey was carried out on a total of 1030 farms. In previous years farmers were asked for their plans for the coming year in relation to breeding stock and arable crop planting. However with quotas on all the main enterprises the changes planned between years were found to be extremely small. In the autumn of 2003 it was decided to ask farmers view on issues relating to proposed policy changes and schemes which could impact on their future livelihood in farming.

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 Mid-Term Review of the CAP and the outcome of the Luxembourg Agreement.

Farmers were questioned on general knowledge/views on impact of the MTR Agreement and also detailed questions on how they would adjust their individual farm enterprises. Only responses to general knowledge and views on MTR are presented here. MTR implication for individual farm enterprises will be presented in a further report. Farmers were asked whether they preferred full de-coupling or partial de-coupling in relation to each direct payment scheme (sucker cow, steer premium etc.) The Minster for Agriculture announced full de-coupling of all schemes on 19 October 2003 but the interviewers continued to ask farmers which option they themselves would prefer. The results are shown in Table 1.2 by system of farming.

Table 1.2: Farmers preferences on full/partial de-coupling

	Dairying	Cattle	Sheep	Tillage	All
	%				
Full de-coupling	84	84	91	90	85
Partial de-coupling	14	10	8	2	11

Source: Teagasc National Farm Survey

The results show the vast majority of farmers in favour of full de-coupling with 90 per cent of sheep and tillage farmers in favour.

Data in Table 1.3 show responses to queries on farmers level of knowledge of the MTR Agreement by system of farming.

Table 1.3: Knowledge/Familiarity of MTR Agreement and de-coupling issues

	Dairying	Cattle	Sheep	Tillage	All
	%				
Familiar	78	60	87	66	72
Not familiar	22	40	13	34	28

Source: Teagasc National Farm Survey

Sheep farmers were most acquainted with the MTR Agreement followed by dairy farmers with cattle farmers being the least familiar. Overall 28% of farmers responded that they were not familiar with the de-coupling issues. Farmers were also asked if they had considered or evaluated how the different options would impact on their own farms and the results are shown in Table 1.4.

Table 1.4: Evaluation of impact of MTR Agreement on own farms

	Dairy	Cattle	Sheep	Tillage	All
	%				
Evaluated impact	60	50	67	54	55
Not evaluated impact	40	50	33	46	45

Source: Teagasc National Farm Survey

Again sheep and dairy farms were most active in considering implications of agreement on their business.

Farmers were also asked their opinion on how the agreement affected their farm income in the medium to long term (Table 1.5)

Table 1.5: Expected impact of MTR Agreement on farm income

	Dairying	Cattle	Sheep	Tillage	All
	%				
No change	23	48	56	47	42
Increase	6	12	8	15	10
Decrease	64	31	30	29	40
Don't know	7	9	6	8	8

Source: Teagasc National Farm Survey

Forty two per cent of farmers interviewed responded that the outcome of MTR would have no impact on their income, whilst 10 and 40 per cent replied that it would increase or decrease their incomes respectively. The sheep system had the highest percentage of farmers who felt that MTR would have no impact (56%), whilst the dairying system had the lowest percentage (23%). Tillage and cattle systems had the highest percentage of farmers who felt their incomes could increase whilst dairy farmers had the highest in the decreased income response (64%).

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 2003 versus planned investment in 2004. In the autumn of 2003, 22,160 farmers stated that they planned on investing an average of €13,186 per farm in 2004 giving a total investment of €292 m. This is a decline on the 25,500 farmers who planned additional investment in the autumn of 2002 for the 2003 year, but average planned investment per farm was lower at €11,500. Overall planned investment for 2004 was almost identical to that for 2003 at €295 m (Table 1.6)

Table 1.6: Farm investment planned for 2004 (€m) by investment type compared to planned 2003 investment.

	2004		2003		Change	
	€m	%	€m	%	€m	%
Machinery	64	22	70	24	- 6	- 9
Buildings	117	40	151	51	- 34	- 23
Land	73	25	35	12	+ 38	+ 109
Milk quota	31	11	26	9	+ 5	+ 19
Other	7	2	13	4	- 6	- 46
Total	292	100	295	100	- 3	- 1

Source: Teagasc National Farm Survey

However investment seldom turns out as planned in reality and the 2003 year was no exception. The actual investment by farmers in 2003 was much higher than that planned - 39,084 farmers invested a total of €493m or €12,609 per farm. In the past farmers have always understated planned investment in machinery and 2003 was no exception with an actual investment in machinery of €187m compared to that planned of €70m. The actual investment in farm buildings in 2003 was less than that planned i.e. planned €151m but only actually invested €108m. Actual investment in milk quota in 2003 was €43m compared to that planned of €26m. If the above pattern of understating investment is repeated than actual farm investment in 2004 could be in the region of €490m.

Table 1.7: Planned farm investment by system of farming 2003 and 2004

	2004		2003	
	€m	%	€m	%
Dairying	136	46	144	49
Cattle	80	27	79	27
Sheep	55	19	48	16
Tillage	21	7	24	8
Total	292	100	295	100

Data in Table 1.7 shows that dairy farmers continue to account for the bulk of planned investment at 46%. 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 and 46% in 2004. Planned investment on cattle and tillage farms have remained fairly constant with planned investment by sheep farmers increasing from 8% of the total in 1999 to 19% in 2004. The increased investment on sheep farms could be linked to a number of factors - participation and meeting REPS criteria, enlargement of flock sizes and investment to reduce labour requirements.

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Situation and Outlook for Dairying 2003/04

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Paper not available

The Situation and Outlook for Cattle 2003/04

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Summary

This review and outlook covers the period up to, but not including, the introduction of the de-coupling of the animal-based Direct Payments (DPs) for cattle production which will be initiated in 2005. A substantial portion of the review relates to the margins for cattle enterprise on the 1,000 plus farms in the National Farm Survey (NFS) for the year 2002 and comparisons with similar data for the two preceding years.

Compared with the previous year, the overall outcome for 2002 was an increase in nominal value of the gross margin for the aggregate cattle enterprise by €28 per forage hectare (€/ha). Approximately half of this increase was administrative and arose from a revenue transfer from 2003 into 2002. This was due to the combined impact of an overshoot of the Special Beef Premium (SBP) quota which arose from more prompt applications for SBPs by farmers to establish their future entitlements plus a decision to use an 80% pay-out rate for DPs in 2002.

When all of the DPs are excluded, the market-based margins in 2002 continued their downward trend. For the aggregate cattle sector the decrease in 2002 was €22/ha, equivalent to a 13% reduction. Since only 30% of the gross margin for the entire cattle sector was market-based in 2002, the overarching influence of the DPs was readily apparent. For some fattening systems this proportion had declined to 6%, and while breeding systems still appeared to get over 30% of their gross margin from the market, this figure is somewhat illusory as it is largely a consequence of the DP capitalisation process.

Unlike earlier years, direct costs began to increase in 2001 and even more so in 2002. For most cattle production systems, the scale of the increase in 2002 was in excess of €20 per hectare. All systems incurred additional expenditure on concentrate feeds but there was an even larger increase for pasture costs**.**

It is estimated that the gross margin for the aggregate cattle enterprise for 2003 could increase by about 8% on 2002. This results from the combined impact of a small reduction in costs, additional revenue from sales arising from higher slaughterings and from DPs when the 80% pay-out rate was agreed and implemented.

The forecast for 2004 shows that the cattle enterprise gross margin will decline sharply, by
quantify. Should this forecast prove accurate, it will be the lowest gross margin for the aggregate cattle sector since the very unfavourable year of 1999.

In the event of an 80% pay-out rate for DPs being implemented in the autumn of 2004, the reduction in the gross margin would be contained at less than €100/ha. But this would be borrowing revenue from 2005 and reduce cash flow in the early half of 2005. However, the cash flows and incomes on cattle farms in 2005 would benefit from the payment of 100% of the revenue from the fully de-coupled single payment, which is scheduled for payment in December.

Introduction

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

- A review of policy and market conditions in recent years
- 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 2003
- A forecast of costs and margins for the aggregate cattle sector for 2004.

The opening section reviews the evolving EU policy and fluctuating market conditions under which the Irish cattle enterprise functioned in recent years and this provides 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 2002. The margins for 2002 are evaluated and compared with similar data for the two preceding years.

Following this appraisal, a review is presented of market conditions that prevailed in 2003, 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 2004, culminating with a forecast of the likely revenue, costs and margins for the aggregate cattle enterprise.

Since the de-coupling of the animal based Direct Payments (DPs) does not occur until 2005, the Mid Term Review (MTR) agreement will have only an indirect affect on the forecast for 2004. Some initial impact of de-coupling will arise in 2004 as the capitalised value of the existing DPs begins to "wash-out" from the prices of calves and young animals. While these adjustments could have serious consequences for the margins for individual cattle farmers, most of the immediate impact is confined within the aggregate cattle sector. The main exceptions are the cost of calves derived from the dairy herd and the possible value of calves and weanlings exported live in 2004.

Policy and Market Context

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

Agenda 2000

Most of the scheduled changes arose from the phased implementation over three years of the Agenda 2000 CAP agreement, starting in the year 2000 and ending in 2002 but with farm revenue consequences extending to 2003. In each of the three years in this period the EU intervention price for beef was reduced by 7.5 per cent. In parallel with these support price reductions, the value of the DPs were increased and some new DPs were phased-in. Also, the compliance age for the special beef premium (SBP) was reduced by one month.

Unscheduled changes

Many of the unscheduled changes arose in 2001, but they also had consequences for subsequent years. It is appropriate therefore to first review the major changes, and especially the issues that precipitated the unscheduled policy changes.

After a very poor financial year in 1999, Irish cattle prices recovered sharply early in the year 2000. In late autumn 2000 the second BSE crisis caused an abrupt price collapse in

Continental EU markets and the lack of outlets precipitated a larger than expected end of year carryover of cattle on Irish farms.

The outbreak of Foot and Mouth disease (FMD) in the UK and its subsequent introduction into Ireland seriously disrupted cattle movements and trade within Ireland from late February to the middle of June 2001. The net result was that many heavily stocked dairy farms had to retain extra calves and young animals and purchase fodder and concentrate feed to maintain them. Equally, there were many cattle farms with adequate supplies of fodder and grass but they could not obtain animals to use them. Some of these extra costs were subsequently offset by a good and extended grazing season with a particularly mild but wet autumn.

Arising from the FMD, a large volume of beef and sheepmeat was removed from the market in the UK and resulted in strong prices and an extra demand for imports. This unexpected demand helped to sustain Irish cattle prices for 2001 and 2002, especially for cattle under 30 months.

Cattle prices in Ireland also benefited from decisions by the Irish government to fully implement the EU purchase for destruction scheme (PFD) for cattle over 30 months of age. Irish exports to continental EU in 2001 were squeezed between the low beef prices prevailing in the re-nationalisation markets and relatively high Irish cattle prices supported by the PFD.

In 2002, there was strong competition in the high priced/quality segment of the EU market from South American suppliers of beef following the currency collapse in these exporting countries. Throughout the year, cattle prices in Continental EU strengthened in response to the recovery of the demand for beef but most markets remained largely nationalised. By the end of the year the price revival on Continental EU markets was almost complete. Apart from beef sales to Russia and Lebanon, there was an almost complete collapse of the trade in beef and live cattle to 3rd countries in 2001 and 2002.

Adjusting the pay-out rate for DPs

In response to the evolving market situation in late 2000, the Minister for Agriculture, Food and Rural Development sought and obtained EU permission to increase the value of the 1st moiety of the direct payments (DPs), from the normal 60%, to 80% of the total. For largely the same reasons, this process was repeated in 2001 and 2002. The 80% advance payment was also implemented in 2003 in response to drought conditions in continental EU. This has a dual impact on the comparisons of annual margins as:

- It shifts cattle revenue between years but does not increase total farm revenue
- the individual farmers most affected by the fluctuations in cattle prices are those that are least dependent on the value or the rate of pay-out of the DPs.

With the phasing-in of the Agenda 2000 agreement, these percentage pay-out rates relate to different unit values for individual DPs which were increasing annually in the period 2000 to 2003. In addition, the pay-out rate does not apply to all DPs, thus 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.

The scale of these inter-year revenue transfers is substantial, and by their nature these payment transfers shift directly and completely into margins and income. For example, in excess of €100m revenue was transferred from 2003 into 2002 once the pay-out rate was increased to 80% in 2002. Most, but not all, of this revenue was subsequently replaced in 2003 with the repeat decision on the 80% advance payment in 2003. However, this revenue will not be replaced in 2004 unless some unusual market or cost circumstances prevail.

SBP overshoot

The EU Mid Term Review (MTR) proposals on de-coupling of DPs, published in the summer of 2002, led to considerable speculation as to which years would be used for establishing future payment rights for individual farmers. Reacting to informed speculation, Irish cattle farmer's quickly concluded that 2002 would constitute an integral part of the base year period and they set out to maximise the number of applications for SBPs in 2002 to enhance their future payment rights. This caused considerable distortions within the cattle trade in the latter half of 2002 and led to:

- cattle prices becoming extra sensitive to the dates of birth of animals concerned, and
- a considerable overshoot of the Irish quota for SBP applications in 2002.

The SBP quota overshoot in 2002 resulted in potential 2003 SBP revenue being paid out to farmers in 2002. This overpayment in 2002, estimated to be of the order of €20 million, resulted in a revenue "claw-back" from the 2nd moiety payments in the spring of 2003. But the 2nd moiety payments were already reduced by the earlier decision on the 80% advance pay-out of DPs in 2002. Hence, the revenue from SBPs in the spring of 2003 was down on that for the previous year.

Under an earlier agreement, the claw-back had to be confined to farmers who had over 50 SBP applications in 2002. Because the claw-back was confined to only about half the number of SBP animals, percentage claw-back per affected animal was almost twice the percentage of the applications overshoot. Cattle farmers involved in the finishing systems tend to have the larger herds of SBP animals. Consequently they were the most severely hit by the SBP claw-back which also included their related extensification premium.

The aggregate effect was the transfer of a considerable volume of DP revenue, estimated to be about €55/ha, from 2003 into 2002. This would have increased the margins in 2002 for a wide range of cattle farmers but the consequential reductions in margins in 2003 will be confined to the larger farmers who are mainly involved in cattle finishing.

Review of 2002

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 output 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 2002 together with the comparable data for the two preceding years are presented in Table 2.1.

The overall outcome for 2002 is an increase in nominal value of the gross margin for the aggregate cattle enterprise by €28 per forage hectare (ha). This increase is approximately half the estimated additional revenue in 2002 that arose from the combined impact of the higher pay-out rate for DPs and the SBP overshoot discussed above. The net impact of these adjustments was to convert a potential decline in the average cattle margin in 2002 into an increase of the same order of magnitude.

The increase in the overall margin in 2002, masks substantial differences in the changing fate for individual segments within the overall cattle enterprise. The margins for the breeding systems of "single suckling" and "rearing on dairy farms" increased by €37 and

€23 respectively, more than recovering the decline experienced in 2001. The margin for "weanlings to stores/finish" increased by €37, or about 8% in 2002, but this followed an even larger increase in 2001. In contrast, the margin for the "stores to stores/finish" system increased by €80 in 2002 but recovery is still less than the decline experienced in the previous year.

The margins for all of the cattle systems are likely to have benefited from the added incentives for prompt applications for SBPs in 2002. But, as noted earlier, fattening systems in 2003 are more likely to bear a disproportionate share of DP claw-back arising from the SBP overshoot in 2002.

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

	2000	2001	2002
Single Suckling	430	412	449
Rearing-Dairy Farms	585	568	591
Weanlings to Stores/Finish	432	506	543
Stores to Stores/Finish	458	365	445
All Cattle Systems	472	469	497

Source: Teagasc, National Farm Survey
Note: headage excluded for all years

Costs
Apart from years with particularly adverse weather conditions, Irish cattle farmers have been very successful at containing direct costs, excluding the costs of animals that they must purchase. However, unlike earlier years, direct costs began to increase in 2001 and even more so in 2002. Direct costs rose by €12/ha for the "stores to stores/finish" system in 2002. For the other three systems evaluated, the scale of the increase was in excess of €20/ha.

All of the cattle production systems incurred additional expenditure on concentrate feeds. But, there was an even larger increase for pasture costs. Unfavourable weather and pasture growth may have been factors increasing costs. Also, perhaps, these cost increases are now reflecting the combined impact of the additional emphasis on getting animals to slaughter weights at a younger age and on maximising the use of pasture through the exploitation of an extended grazing season.

Market based margins
A rather different picture on margins emerges when 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 2002 was by €22/ha, equivalent to a 13% reduction.

With the progressive switchover to the direct payment system of income support the unit values of the DPs has been increasing. An increasing portion of their values will inevitably be capitalised into the prices of calves and young cattle as long as the acquisition of the DPs remains tied to the numbers of specific animals, the supply of which is controlled by quotas and quasi-quotas[1]. This 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.

[1] This capitalisation process will be reversed after 2004 when the DPs are decoupled from the animals as scheduled under the MTR agreement for a single farm payment.

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

	2000	2001	2002
Single Suckling	170	139	139
Rearing-Dairy Farms	324	281	223
Weanlings to Stores/Finish	127	88	58
Stores to Stores/Finish	165	34	26
All Cattle Systems	202	171	149

Source: Teagasc, National Farm Survey

In 2002, the farmers in the "single suckling system" succeeded in maintaining their market-based margin. The "rearing on dairy farms" production system still obtained the largest market based margin in 2002. But compared with 2001, this system incurred a decline of €58/ha, or a 20% reduction. This follows another reduction of about 13% between 2001 and 2000.

As expected, the market based margins for the two cattle fattening systems of "weanlings to stores/finish" and "stores to stores/finish €30/ha and €8/ha respectively. The market based margins for these finishing systems are now so small that cattle farmers involved in them can only survive by skilfully managing their production technology, plus purchases and sales, within an administrative armoury that is a mix of information on:

- the value of each individual DP
- the data in the cattle register on the dates of birth, the gender and premium status of individual animals
- the rules and application forms for area aid, suckler cow premium, special beef premium, census dates for extensification, and the retention periods required for specific animals.

Even with this capacity to adjust, these cattle farmers are experiencing increasing difficulty in maintaining their margins. Their strong capacity to adjust their production systems combined with an inherently robust survival instinct has enabled the very high numbers of cattle producers to remain in business despite the poor margins, especially from the market.

Market focus

When the cattle enterprise is examined from a beef market rather than a farm 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 2002 was only 30% for the entire cattle sector.

For the two fattening systems, this proportion had declined to 11% and 6%. While both of the breeding systems still appear to get over 30% of their gross margin from the market, even these figures are somewhat illusory. As already noted, much of this apparent market return arises as a consequence of the DP capitalisation process. In addition, the market for the cattle sales from these breeding systems is to provide inputs for farmers involved in cattle fattening, and these farmers now rely almost exclusively on DPs for even their gross margin.

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

	2000	2001	2002
Single Suckling	40	34	31
Rearing-Dairy Farms	55	50	38
Weanlings to Stores/Finish	29	17	11
Stores to Stores/Finish	36	9	6
All Cattle Systems	43	37	30

Source: Teagasc, National Farm Survey

Against these results, it is perhaps opportune that the recent MTR agreement provides for all animal-based DPs to be de-coupled from 2004 onwards. This will allow Irish cattle farmers refocus their management efforts towards better exploitation of their grassland and animal husbandry skills and centre the resulting output in the direction of the requirements of the beef consumer.

Estimates for 2003

World beef prices strengthened in 2003, especially those in USA and Australia. Apart from Russia, Irish exports to 3rd countries remained small. By the end of 2002 the price revival on Continental EU markets was almost complete. Throughout the year, the price of bull beef was maintained in Italy and this presented a market opportunity for beef derived from well fleshed young Irish cattle. In France and Germany prices declined sharply in late spring and only recovered slightly in the second half of the year. Also, some EU markets remained difficult due to the continued preference for local production.

The strong British demand that existed for beef imports in 2002 continued throughout 2003 and this provided a volume outlet for Irish beef. But, in the first half of the year the value of Sterling declined sharply relative to the euro, resulting in a total decline of the order of 15%. As a consequence, steer prices were under pressure especially in the first half of the year. This provided an added incentive for Irish exporters to refocus more exports towards Continental markets.

Revenue from sales

The resulting seasonal price pattern for prime cattle in Ireland was very different to the previous year. In contrast, the prices of cull cows in Ireland, which had been very weak in the latter half of 2002, recovered sharply in the first half of 2003. By mid year cow prices were similar to those prevailing in the same period in 2002. The estimated out-turn for the entire year is likely to be a small overall reduction in cattle prices but with steer prices down by almost 3% and cow prices higher by about 7%.

A relatively strong demand from Spanish and Italian feedlots resulted in strong prices and increased live exports of weanlings and young store cattle during the year. But the live trade with Spain weakened towards the end of the year. Compared with 2002, the number of steers and cows slaughtered in 2003 are estimated to have increased by about 7% and almost 5% respectively. It is estimated that total cattle slaughterings in 2003 will increase by about 6% compared to 2002. Because of the good grazing season, slaughter weights are likely to be higher. When the additional numbers are combined with the changes in prices it is estimated that the total value of sales in 2003 will have increased by about 5% in 2003.

Revenue from DPs

The SBP quota overshoot in 2002 resulted in an overpayment of DPs in 2002 and a consequential revenue "claw-back" of approximately €20 million from the 2nd moiety

payments in the spring of 2003. The 2nd moiety payments had already been reduced by the earlier decision on the 80% advance pay-out of DPs in 2002. Hence, the revenue from SBPs in the spring of 2003 was substantially down on that for the previous year.

Much, but not all, of this revenue loss was replenished once it was decided in the autumn of 2003 to again increase the pay-out rate for the 1st moiety to 80%. Because of the added incentive to increase the number of SBP applications in 2002, the number of animals available for collecting SBPs in 2003 is lower. A much higher proportion of the 2003 applications will arise towards the end of the year and consequentially some of the advance payments may spill into 2004. For both these reasons the revenue from SBPs in 2003 is likely to be down.

Additional revenue will arise from extensification payments in 2003 due to the combined influence of the higher value of the payment itself and the large number of animals involved in the 2002 SBP applications. When all factors are considered it is estimated that the total value of the revenue from DPs could be slightly higher in 2003.

Reflecting the increased demand arising from the recovery of the live trade to Holland, Spain and Italy, the cost of calves derived from the Irish dairy herd was higher in 2003. But when these are offset against the increased revenue from sales and DPs, it is estimated that the value of aggregate output for cattle in 2003 could be almost 4% higher than that for 2002.

Costs

Apart from calf costs, most other direct costs could be lower in 2003 due to the excellent grazing and forage conditions over most of the country, apart from a period in April and May. With the added emphasis on early marketing, some farmers are feeding additional concentrates but the overall level of concentrate feeding is likely to decline due to the weather and forage situation. In response to the drought conditions in mainland Europe concentrate feed prices have increased in the latter part of 2003, but the main impact on cattle costs will be in 2004.

Estimated margin

A summary of the above estimates of revenue and costs and the resulting estimate of gross margin for 2003 is presented in Table 2.4. It is estimated that the gross margin for the aggregate cattle enterprise for 2003 could be increased by about 8% on 2002 due to the combined impact of a small reduction in costs and additional revenue from sales and DPs.

Forecast for 2004

The strong British demand for cattle and beef imports evident in 2003 will likely continue in 2004. The main undefined factor is the possible impact on supplies in the event of a phasing-out of the over thirty month (OTMs) scheme. The very low level of intervention stocks and the favourable overall market balance for beef within the EU would suggest that the demand for Irish cattle and beef could be maintained.

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

	2000	2001	2002	2003[1]	2004[2]
Revenue	833	836	877	909	768
Direct Costs	361	367	381	371	375
Gross Margin	472	469	496	538	393

Source: Teagasc, National Farm Survey and author's estimates
[1]Estimate [2]Forecast
Note: headage excluded for all years

Revenue from sales
The demand for beef in Britain and Continental EU is likely to ensure that Irish cattle prices in 2004 could be maintained at a level close to those prevailing in 2003. Prices might even be higher if demand for beef recovers further and the EU beef market responds to the lack of intervention stocks as it has traditionally. The relatively strong demand from Spanish and Italian feedlots is likely to continue for live exports of weanlings and possibly for young store cattle.

The de-coupling of DPs post 2004 could seriously disrupt on Irish cattle supplies and prices even in 2004. The situation is further compounded by the possibility of different degrees of de-coupling of DPs operating in a number of EU member States.

As the year progresses in 2004, the de-capitalisation of part of the value of the DPs from the prices of all Irish cattle will begin to emerge. The ineligibility of specific animals for some or all DPs will become more transparent and will likely result in serious price differentials developing between specific types of animals.

Farmers will become increasingly conscious of the "wash-out" of the capitalised value of the DPs from the prices of their animals and its likely future impact on cattle prices in general. They could react either by premature shedding animals or alternatively retaining them longer in the hope of maintaining the prices of slaughter animals. Similarly, the de-coupling of the SCP could precipitate some level of de-stocking of suckler cows in Ireland in the autumn of 2004 in anticipation of the likely lower price for suckler cows in 2005. If different de-coupling options were chosen by other Member States, a complex market could emerge which could result in unusual demand, cattle price differentials and trade for specific animal types.

The planned de-coupling of the DPs from the Irish cattle after December 2004 will be a strong factor in maintaining the numbers exported and slaughtered. Any animals approaching slaughter weight are likely to enter output before the slaughter premium is de-coupled. However, an excess supply of animals could result in some price discounting. All factors considered it is forecast that the numbers of animals sold for slaughter and live cattle export in 2004 is likely to be close to that prevailing in 2003. A reduction of about 3% in the value of sales is forecast.

Revenue from DPs
Since all of the Agenda 2000 increases in the values of the individual DPs are fully implemented, no additional revenue will arise from this source in 2004. As noted earlier, a knock-on impact of the overshoot of the SBP quota in 2002 was that a much higher proportion of applications in 2003 will arise towards the end of the year and some of the advance payments for these applications may spill into 2004.

As the pay-out rate for the advance payment was increased to 80% in 2003, only 20% remains for the 2nd moiety payment in 2004. Furthermore unless difficult market conditions prevail the pay-out rate for the advance payment in 2004 will automatically revert to the official rate of 60%. This means that, with the exception of extensification, cattle farmers will only receive the equivalent of 80% of the value of the SCP, SBP and Slaughter premiums in 2004.

With de-coupling imminent, there will be an added incentive to enter all eligible animals for the SBP in 2004. Animals would have to be born before May 2003 to be eligible for

the 21 month premium in 2004. Similarly, animals would have to be born before June 2004 to be eligible for the 9 month SBP. Since the calves born in 2004 cannot collect the second steer premium some of these may be entered for the higher value bull premium.

The efficiency of applications is difficult to establish because eligible animals may not be located in the optimum farm circumstances at the appropriate time. Therefore, unless there is a large number of animals eligible for SBPs in 2003 carried forward into 2004, which appears unlikely, the number of animals eligible for SBPs in 2004 will decline significantly, possibly by as much as 25%. The reduction in the use of the slaughter premium may not be as large due to reasons outlined earlier. The revenue from extensification in 2004 will be largely unaffected by these developments because it relates to the 2003 applications for SCP and SBPs.

Assuming that the pay-out rate for DPs in the autumn of 2004 remains at 60%, the overall impact of these changes could be a reduction in the revenue from DPs by the equivalent of €80/ha. When combined with the estimated reduction in the value of sales, the reduction in revenue could be about 15%.

Costs

Calf costs are likely to remain high in 2004 and they could even increase as cattle farmers undertake a final push to maximise their premiums. The price of calves ineligible for the 9 month SBP may also be supported in 2004 by the veal market, since the supply of calves for veal in Holland and Italy will still be constrained by the DP system. Apart from calf costs, most other direct costs are expected to remain largely the same in 2004, with volume reductions largely offsetting price increases. However, concentrate feed costs are likely to increase due to a combination of some extra feeding for earlier marketing of animals and feed ingredient price increases arising from the drought in continental EU in 2003.

Margin forecast

A summary of the above forecasts of revenue and costs and the resulting forecast of the gross margin for 2004 is shown in Table 2.4. While this forecast contains many variables that are difficult to quantify, it shows that the gross margin will decline sharply by €145/ha in 2004 relative to 2003. Should this forecast prove accurate, it will be the lowest gross margin for the aggregate cattle sector since the very unfavourable year of 1999. In the event of an 80% pay-out rate for DPs being implemented in the autumn of 2004, the reduction in the gross margin would be contained at less than €100/ha. But this would be borrowing revenue from 2005 and reduce cash flow in the early half of 2005. However, the cash flows and incomes on cattle farms in 2005 would benefit from the payment of 100% of the revenue from the fully decoupled payment which is scheduled for payment in December.

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Situation and Outlook in Irish Agriculture 2003/04
A New Policy Framework for Irish Livestock Farming

Tom Moran

Introduction

I have been asked to talk this afternoon on the most recent changes to the CAP under the heading ***" a new policy framework for Irish livestock farming".***

It has been repeated quite often of late that the Luxembourg Agreement represents ***the*** most fundamental reform of the CAP since its inception more than 40 years ago, and that may well be true.

But we are all wise enough to know that fundamental change does not happen overnight. The roots of this latest agreement go back to the Mc Sharry reforms of 1992 when real and fundamental change in the direction of CAP policy was initiated.

Up to then there had been a direct and necessary link between production and supports, which reflected the economic and social development of the European Community up to that point. As the EC grew and prospered over the years and technology advanced, together with a community that progressively enlarged, a new direction for policy was carved, one that created a better balance internally within the community while simultaneously reflecting the need for change that came from external pressures, driven by GATT.

And so we began a process that created the framework for today's new policy direction, a process that saw a shift from product and production based supports to direct payments. This was further intensified through Agenda 2000 and led directly and swiftly to the Luxembourg Agreement, which itself was framed on the eve of a major Enlargement and in the shadow of the current WTO round of trade negotiations.

This was the case also for milk where the introduction of strict quotas in 1984 allowed for price support and output to be managed quite well. Here too however, WTO pressures were forcing further reforms.

Framework of Policy

The Luxembourg Agreement stemmed from the mandate of the European Council of Berlin in 1999 requiring the Commission to submit Mid Term Reviews of Agenda 2000. This was in part a response by the Commission to its disappointment in not getting agreement on the full range of its proposals under Agenda 2000. But perhaps more fundamentally, it was recognition that society had expectations of the CAP and that these expectations needed to be addressed in a more structured manner.

In essence EU citizens, as much as the main players in the industry had common objectives for the CAP that required

- More market orientation and increased competitiveness,
- Higher standards of food safety and quality,
- Integration of environmental concerns into agriculture policy,
- A fair standard of living for farmers, and
- Simplicity in the delivery of policy.

Clearly much had been achieved in the reform process since 1992. Market balances had been improved and agriculture incomes had strengthened, while on the broader map a sounder basis for enlargement and WTO negotiations was established. However there remained concerns about the viability of the internal market compared to world markets that were demonstrating a more competitive edge and were setting new challenges for EU agriculture.

Agenda 2000

Agenda 2000 set about meeting these challenges by bringing the farmer closer to the market through a series of measures which resulted in progressive price support reductions, compensated through increased direct payments.

Many of you will recall that in the beef sector, before the BSE crisis, intervention had reached zero level. Even though the crisis in Continental Europe that occurred in 1999/2000 led to another round of intervention buying, that stock of some 260,000 tonnes has been sold in the past fifteen months without causing any disturbance to internal market price relativities. The bounce back of the beef market over the past few years has been astounding, from a huge drop in consumption to a situation now where the EU market is in deficit and there are no intervention stocks.

By and large the market management mechanisms agreed in Agenda 2000 were flexible enough to facilitate the recovery of the beef market and effective price support levels remained relatively high compared to world market prices, while the intervention price was set at a safety net level. Special measures such as the cattle destruction schemes were needed to deal with the crisis at its peak in 2000.

On the other side, direct payments in the beef and sheep sectors were paid per head of animal and it became evident that this form of support brought about premium-led production rather than the more desirable market-led production. An analysis of Ireland's rate of utilisation of the various coupled premium schemes available in these sectors demonstrates that for 2002 and again this year our utilisation rate has been complete in all areas except the suckler cow premium where it was close enough, at 97%.

It was expected that lower institutional prices following from Agenda 2000 would encourage greater market price differentiation between lower cost and higher added value products and that it would bring farmers closer to the market than was the case heretofore. However, that element of policy was not particularly effective. This was because direct payments remained linked to certain types of production and therefore provided a safer source of income for farmers than the risk of increasing reliance on market opportunities.

Direct Payments

A key consideration in Agenda 2000 was to ensure a fair standard of living for farmers and this was reflected in the increased direct payments that were introduced as compensation for the price cuts. These increases were necessary in order to preserve the European model of Agriculture on the basis that that market revenues
alone were not enough to do so.

These payments have been the bridge between the market returns and the maintenance of the European model of Agriculture, primarily based on the family farm. They have, and will continue to provide a softer transition and adjustment to a more market-oriented environment. Indeed, there is no doubt that the benefit of the direct payment system has partly contributed to a slowing down in the rate of decrease in farm employment.

The direct payment system currently in place however, while it has achieved much, it still has serious drawbacks. It is excessively bureaucratic – and must be, given its nature. There are quotas, retention periods and stocking density limits. But probably most of all it has given rise to a situation where rather than being compensation for certain market losses over time, the premiums have become an end in themselves. When you get to a stage where animals are being kept – not because the market wants them – but because they draw a subsidy, it is time to think hard about the future of the sector.

All in all, it has been evident that Agenda 2000, while providing continuity in the transition from the McSharry reforms of 1992 to the present day, has not provided the range of solutions that it had prescribed. It also failed to meet the requirements that were expected of the Community in its search for further agreement in world trade agreements through the WTO.

Mid Term Review

And so the Mid Term Review set out the challenge to reform the structures of supports in farming so that new and emerging threats could be tackled head on and opportunities grasped that would have sustainable benefits to EU agriculture and food producers. The MTR was also geared to enabling the EU model of agriculture to be preserved around competitively scaled family farm enterprises.

Chief amongst the objectives of the MTR was the need to recognise the constraints under which production was organised and delivered, particularly in the livestock area. Premium schemes for beef and sheep have been characterised by an intensity of regulation, partly related to production control and partly related to environmental practice, particularly geared towards a move to extensive forms of production. While claiming some degree of success, intensive production across the Community has not been discouraged to the extent required and production remained ahead of Community consumption, with surplus production exported with the aid of export refunds.

The type and variety of policy instruments that created the nightmare of bureaucracy that has often been levelled at the CAP also required immediate surgery. Headage payments, quota limits, stocking density conditions and exemptions, retention periods and age limits gave perhaps justifiable grounds for complaining that farming in all its simplicity was being strangled by the progressive and unrelenting drift to bureaucracy.

From this emerged the concept of de-coupling, an idea that would have the potential to free farming from the constraints of much of the bureaucracy associated with existing schemes. Which would, as a result, re-connect the farming sector with the reality of the market. And, very importantly, would allow the CAP to withstand the huge build up of pressure within the WTO.

And so, for the beef and sheep sectors the proposal to de-couple the headage payments and replace them with a single income payment per farm based on entitlements established in the years 2000, 2001 and 2002 has been accepted in Ireland as the best option for the future of farm families. It is interesting I think to record the fact that the Luxembourg negotiations resulted in a range of choices being available to Member States, which essentially left them as the final arbiters of their destiny rather than leaving them to accept a *fait accompli.* It was I would say the classical implementation of the principle of subsidiarity that is so often preached but seldom applied.

When farmers chose the de-coupling route the choice was a clear rejection of the option to retain either the Suckler Cow Premium, or the Slaughter Premium, or a combination of both, or the Special Beef Premium and the Ewe Premium as coupled payments. This was

equally true of the arable sector where a partial de-coupling option was available. In the milk sector, the only option was taken to de-couple the Dairy Cow Premium.

All these options had emerged at Luxembourg in an attempt to arrive at an agreement that could be supported by all Member States, enabling them to make choices that best reflected the structures of their respective farm sectors.

Position of Member States

Apart from Ireland, Germany is the only Member State to date to opt to fully de-couple all premium payments from 2005, which they will apply on a regional basis. This means that Germany will apply a regional flat rate hectarage payment for arable producers from 2005, with livestock payments also fully de-coupled, initially on a historic basis. These will be subsequently converted to the same regional flat rate payment by 2012. By then each region would have a single hectarage payment per farm though this may require the re-distribution of up to 5% of direct aid between Federal States.

Austria and Denmark have also formally announced their decisions on de-coupling, the former retaining the combination of the suckler cow and slaughter premium and the ewe premium, while Denmark propose to retain the option of a 75% coupled special beef premium.

Other Member States have indicated their likely approach but have not yet pronounced officially. France has regularly signalled that it wishes to maintain a high degree of coupling for livestock and indications are that it will retain the suckler cow and slaughter premium option as well as the ewe premium. But having won an agreement that Member States may delay implementation of the single farm payment until 2007 France now appears to be drifting towards early implementation.

Belgium, Netherlands, Portugal, Spain, Italy, and Finland are almost certain to retain some coupled systems.

The UK is currently holding consultations on the various options though it would appear to favour possible regional variations between England, Scotland, Wales and Northern Ireland. England is almost certain to opt for full de-coupling while there is some consideration being given in Scotland to partially coupled systems in the beef sector.

In making the decision early, and deciding too on the earliest date of implementation, 1 January 2005, the Minister was conscious that farmers have been in something of a limbo since 2000 brought about by their fear that the MTR might lead to undesirable effects on investment decisions. He was therefore anxious to ensure that farmers were given as much time as possible to make the necessary adjustments to enable them to be properly positioned for the changes that will take place in a little over a year's time.

A key point from all of this is that irrespective of what particular option is chosen across Member States, as a result of the move to the single payment scheme, the vast majority of EU direct aids to farmers will no longer be linked to production.

Impact analysis

In arriving at the decision to de-couple the Minister took into account an analysis that he commissioned from FAPRI Ireland, which was based on several scenarios, all compared to the baseline represented by Agenda 2000. These scenarios catered for all Member States partially de-coupling to the full extent allowed, fully de-coupling and all Member

States fully de-coupling all beef payments whereas Ireland de-couples all payments with the exception of the slaughter premium.

The conclusion from the analysis was that under the baseline i.e. no MTR, by 2012, nominal cattle prices would show little change from 2002, suckler cow numbers are projected to decline by 6% and beef production would remain steady.

Under the scenarios the Irish decline in the suckler cow herd following de-coupling is 18% and this decline impacts on beef production up to a 7% reduction. Exports contract by magnitudes that are roughly comparable to the shifts in production. Similar trends arise in relation to ewe numbers and sheep meat production, 7% and 5% respectively.

Decisively, under all scenarios, the effect of lower levels of production has a positive impact on price. Cattle prices are projected to rise, with full de-coupling, to almost 10% while sheep prices will rise by 13%. Reduced input costs will also be a factor.

In all of this analysis it is important to emphasise that the results are based on analysis that cannot take into account a full empirical view of farmer behaviour, in other words it cannot analyse what approach individual farmers will take when faced with the option of ceasing production once the de-coupled payment has been guaranteed. Nor is it capable of forming a view on the extent to which progressive and commercially scaled producers will increase production to compensate for the overall production loss.

Neither does it take account of the actual de-coupling decisions in Member States as these may not be known until they are communicated to the Commission next August. What is clear however is that farmers will in future have the freedom to respond more directly to market signals than they needed to heretofore when payments were coupled to production.

Implementation Phase

And so not only do farmers have decisions to make about how they want to organise their farm enterprise for the future but the Department too has a massive task ahead in preparing the ground for this fundamental shift in the way CAP funding is delivered to farmers. The planning process to design and implement the structure for the delivery on time of the single most significant change to agriculture generally and to the operations within the Department has already commenced in a serious way.

There are a number of separate elements to this work that will ultimately lead to the implementation of a de-coupled system of payment in 2005. The establishment of the single payment entitlement, in addition to implementing the cross compliance provisions will represent the major challenges of implementing the new regime.

Entitlement to the single payment goes to farmers who are actively farming the land and who can prove historical claims during the reference period. Such farmers will be allotted payment entitlements based on the reference period 2000-2002 and the amount will be calculated at the 2002 rate. Each entitlement will be calculated by dividing the reference amount by the average number of hectares that gave rise to this amount in the reference years. In any year from 2005 payments will be granted for those entitlements for which a farmer has an eligible hectare. This means that in order to get full payment, the farmer must have as many eligible hectares as entitlements.

An example may help to explain this:

20 suckler cows @ €224.15	= 4,483.00
10 SBP animals @ €150	=1,500.00
100 ewes @€29.26	=2,926.00
10 ha. Cereals @ €383.04	= 3,830.40
Extensification Premium on 30 animals @€80	= 2,400.00
Slaughter Premium on 5 animals @ €80	= 400.00
National Envelope (1 slaughter + 3 dry heifers)	= 257.60
Total value of single payment	***= 15,797.00***
Average number of hectares in reference period	= 60
Entitlement value per hectare.	= €263.28

This work will involve establishing the three-year average of animals and area on which aid was paid in the reference period 2000-2002. Some 135,000 farmers will have single payment entitlements established for them and issues related to transfers, farm retirement, partnerships etc. might complicate many of these cases.

It may be further complicated by the calculation of entitlements for farmers claiming *force majeure* and whose payment entitlements will be based on an average of either one or two of the reference years or on the alternative period 1997-1999. A system to cater for new entrants will also be developed, though further elaboration of the terms under which this group will be treated has yet to emerge from Brussels.

An additional element involves the payment, for the first time in 2004, of a coupled Dairy Premium and the conversion of this premium into a de-coupled payment in 2005.

A major task will be the establishment of a National Reserve, which may amount to between 1% and 3% of the national ceiling, from which entitlements to new entrants will be granted or the topping up of existing entitlements.

When the single payment is finally settled it will be reduced by 3% in respect of modulation for 2005, rising to 4% in 2006 and 5% in 2007, plus a percentage between 1 and 3 to cater for the National Reserve, plus an amount for the linear reduction to cater for the *force majeure cases* and new entrants.

Modulated funds equivalent to 85% will be retained in the Member State. While this is obviously an excellent outcome on this point, there will be a challenge to ensure the best possible use for these funds in a de-coupled context.

Planning is now at an advanced stage and various groups have been formed within the Department to ensure that the new system will be up and running in January 2005. Detailed rules of operation will be negotiated with the Commission in the spring of 2004. The first tangible signs of implementation occur today when advertisements for *force majeure* applications are placed in national and local newspapers. Simultaneous to the processing of these cases will be work on the establishment of the single payment entitlement so that provisional entitlements would be issued to farmers next summer.

Sectoral Impact

But the main issues of course concern the impact at sectoral level. First and foremost, for all sectors the most significant impact of de-coupling is the freedom it affords farmers in relation to the balance between lifestyle and farming activity. For many farmers in recent years the general upturn in the economy has presented numerous alternative work options and many have availed of these, either part-time or full-time. De-coupling affords

farmers greater freedom than heretofore in pursuing such options in a more determined and long term manner while maintaining a steady stream of income derived from the single payment system.

For others, de-coupling offers commercially orientated farmer's greater scope to intensify production and allow them to become more market-oriented by producing products that the market and consumers actually want. We have already seen in recent years the effect that a small decline in production or a slight increase in consumption can have in terms of supply balances within the EU and the consequences in the beef sector are that the EU is now a net importer of beef.

This situation creates better opportunities for the Irish beef industry to achieve its broader ambition of moving up the value chain within the community, both by spreading its geographical reach and intensifying growth in individual market segments. De-coupling means that farmers can assume greater control over production by producing for the market rather than producing for premiums. In this the producer's hand is strengthened considerably.

The significant growth in exports this year to Italy shows how a strong relationship between producer and processor manufacturing products for specific customers can create rewards for all. This approach will be more important in years to come in our quest to move into the premium markets across Europe.

As with any commodity it is vital that new market segments are identified and serviced. In the meat sector, consumer lifestyle issues have driven a growing demand for convenience type products – ready to cook, ready to heat or ready to eat products – and these provide a wide range of opportunities for the sector to increase the value of meat products and expand marketability. Ireland needs to be to the forefront in exploiting such market segments.

This is all the more important when we consider the competitive forces abroad - Brazil, Argentina and Uruguay – who have scale, low cost production and currency advantages over EU producers. Brazil in particular poses a threat not only on the internal market but elsewhere, on Third Country markets in which Ireland traditionally traded.

With the return to balance in the beef market, and the leaving behind of BSE as the centre stage issue, the focus of the industry will be on EU markets with the very necessary option of a range of Third Country markets also. An appropriate export refund support system will continue to be an essential.

The new order as well as bringing increased focus on quality, will also sharpen the focus on production and processing costs, on capacity utilisation, and on supply chain management issues. There will need to be increased co-operation and trust between the new unshackled beef farmer and the processor.

The grading of carcases will have to move from what is effectively an outdated model to a market driven means of assessing meat yield and paying for what the market wants. The introduction of machines, which we are working on at present, will facilitate this.

We will need to intensify the examination of the way in which the whole area of food safety control is delivered so that the delicate balance of cost, benefit and optimum delivery mechanism is kept to the forefront.

In the milk sector, the implications of the Luxembourg agreement are considerable and by now are well known and well aired. Reduced support price, less intervention, an extended

quota system and the introduction of direct payments are the main planks.

The decision by Ireland to de-couple the dairy premium from the earliest date possible i.e. by March 2005 embraces the new order head on and avoids a static and short-sighted wish to try to hold back the inevitable restructuring within the sector.

That “inevitable” is a move to greater scale at farm level and the associated need for a greater freeing up of quotas so that those who wish to go can do so and retain the direct payment, and those who wish to grow can do so also.

There is no point in taking on change at EU and world level if we do not look equally at what is within our control, i.e. how we handle quotas within the country. The restructuring scheme, which has been a success story, needs to be looked at fundamentally in the new context. There is a debate taking place on the level of price - in the pre and post-de-coupling period - the manner of fixing the quota price and the categories that can access quota. The debate is constructive and I am confident it will contribute to an early, constructive and imaginative outcome.

Inevitably, 2004 will be different to 2005. Producers holding quota on 31 March 2005 will have the direct payment equivalent of that quota incorporated into the single payment from then on, whether or not they produce milk. Exiting producers will have a choice to make as to when to go. It has been suggested that it would be to the advantage of a producer who is leaving production to go in 2005. However, it may actually suit certain producers to go from 2004 and take the value of the quota up front.

Removing costs, adding value and optimising our systems and structures at farm and industry level is an imperative.

The EU dairy support systems are and remain crucial. It is imperative that the Commission operate these schemes, including export refunds, casein aid and the internal butter and SMP disposal schemes in a reasonable and acceptable way through the period of reducing intervention support price and downward price pressure. The aim must be to use these measures as a set of sophisticated market management tools to achieve a wide set of objectives and not just as a means of reaching an intervention price target.

Conclusion

And so we have reached the threshold of a new policy framework for Irish farming. Though it may represent the end of a structure that has served Irish and EU agriculture very well over many years, providing protection on the one hand from fluctuating market performance and on the other-hand creating the opportunities to sell our products on international markets, it is also the beginning of a new approach where producers become more directly accountable to the market. It also offers greater protection to the CAP both within the EU and in a WTO context.

Undoubtedly there will be farmers who may decide to avail of off-farm income options and exit livestock production completely. But in equal measure I am convinced that others will take on the challenges of the market and respond with competitively produced quality products that will maintain Ireland’s excellent reputation in international markets.

Whichever choice is taken, either one will have availed of the freedom to far that characterises the new CAP.

The Situation and Outlook for Sheep 2003/04

L. Connolly

Sheepmeat Market

The EU Sheepmeat Forecasting Group have predicted that total EU sheep meat production will increase by just under 1 percent on 2002 levels to 1.06 million tonnes. EU consumption is forecast to decline marginally to less than 1.33 million tonnes. UK sheep meat production is forecast at similar levels on 2002, with exports increasing by 13%, whilst imports and consumption levels remain relativity unchanged. The meat and livestock commission (MLC) forecast that UK sheep producers will wait until CAP reform is introduced in 2005 before making any major changes to their sheep enterprise and therefore there will be very little change to size and structure of sheep flock in 2004. French sheepmeat production is forecast to decline by almost two percent in 2003, whilst consumption is forecast to increase by one percent resulting in increased demands in imports of 3% to be supplied by UK, Ireland, Spain and New Zealand.

In the medium to long term EU sheep production is forecast to decline whilst demand continues to remain strong resulting in a positive medium term outlook for the EU sheepmeat sector. Self-sufficiency in EU sheep meat is forecast to fall to 77% by 2008 as a result of continued decline in EU production. EU forecast that supply from non-EU countries will be insufficient due to limited production and tariff quotas resulting in buoyant prices within the EU for sheepmeat. The outlook for Irish sheep producers therefore in the medium to long term is for strong demand on both domestic and French markets resulting in sheepmeat prices remaining firm and the price differential with other meats likely to be maintained. However should New Zealand and/or Australia's tariff quotas be increased in the new WTO negotiations then this would impact negatively on EU sheepmeat producer's returns. The Australian meat sector are forecasting that their sheepmeat production could increase by 30% by 2008. The outcome of WTO in relation to tariff quotas will therefore have a major impact on sheep returns in the EU in the medium to long term.

Sheepmeat Prices

Sheepmeat prices in Ireland have been firm since the outbreak of FMD in 2001. In the year to early November 2003 lamb prices were on average 3.4% less than in 2002. However if lamb prices in the first quarter of 2003 are excluded as being applicable to lambs carried over from 2002, then the average price received for lambs born in the spring of 2003 increased by 2% on that of 2002. Weekly data compiled by An Bord Bia show prices of lambs sold on the early lamb market were 8% higher in 2003 than 2002, whilst prices received for mid-season lambs in 2003 were identical to those of 2002. Lamb supplies in the year to November 2003 have declined by 1% on the comparable period for 2002. However the seasonal slaughter was quite different with 178,700 more lambs killed in first quarter of 2003 compared to 2002, whilst the mid-season lamb kill i.e. May onward declined by over 200,000 head.

Sheep and Flock Numbers

Table 4.1: Ewe and flock numbers 1993 - 2003 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
2002	41,177	4,499
2001	38,632	4,262
2002	36,089	3,887
2003	34,910	3,891

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 2003 with a fall of 1,179 in 2003 to 36,089. Ewe numbers seem to have bottomed out with a small increase in 2003. Average flock size continues to increase with 112 ewes in 2003 compared to 100 in 1993. Of the 35,000 sheep flocks in the county 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 especially post-Fischler CAP Review. Sheep profit margins have improved vis-à-vis cattle and tillage, so it is likely that numbers could increase slightly in 2004.

Sheep Margins

The ewe premium and rural world premium have been fixed at €21 and €7 respectively since 2002. In addition €1.20 extra to be paid per ewe from the National Envelope in 2003. Gross margin data for the main sheep system are shown in Table 4.2. All per ewe data based on ewe-to-ram except for Hill-Blackface, where it refers to per ewe claimed for premium.

Table 4.2: Gross margin (€) per ewe, 2000-2004

	2000	2001	2002	2003[1]	2004[2]
Early lamb	62	92	71	73	70
Mid-season lamb	61	89	74	70	66
Hill-Backface	38	28	40	38	35

Source: Teagasc National Farm Survey
[1]Estimate, [2]Forecast

Actual margins are presented for 2000, 2001 and 2002 with estimates for 2003 and forecasts for 2004. The lowland systems are based on data from flocks on better soils with a wide use range. The data show actual margins on lowland system still ahead of 2000 levels but lower than the exceptionally high margins achieved through higher market prices in 2001. The fixing of the ewe premium has also resulted in more stability in sheep margins especially in relation to the Hill-Blackface system where the premium account for over 70% of the gross margin. Margins for the early lamb system increased due to an 8% increase in lamb prices. Volume of lamb sales were also up during early lamb period (week 13 to week 21) from 362,000 head in 2002 to 401,000 head in 2003,

an increase of almost 11%. Margins for mid-season lamb declined from 2001 to 2002 due to decline in prices from very high levels of 2001. Average decline in lamb prices in 2002 was 11% but this was partially compensated for by an increase in ewe premium from €9 in 2001 to €21 per ewe in 2002.

The outlook for 2003 is that gross margin per ewe from mid-season lamb will decline due to decline in prices and a small increase in production costs. The 2003 year was extremely favourable in relation to weather and grass growing conditions resulting in reduced volume of concentrates. In addition prices of the main input costs remained virtually static with the exception of veterinary costs. Margins for Black-face Mountain system showed a dramatic increase in 2002 from €28 per ewe (claimed for premium) in 2001 to €40 in 2002. This reflects the huge dependency of this system on direct payment, as virtually all of this increase was due to the increase of €12 per ewe in the premium brought about by the introduction of the fixed premium in 2002.

The outlook for 2004 is a small decline in sheepmeat prices and higher production costs. Sheep numbers continue to decline within the EU, so prices should remain firm in the short to medium term. Direct payments are also fixed and should not result in change in output. Production costs however are likely to rise in 2004, as it is difficult to see the favourable climatic conditions of 2003 being repeated in 2004 and also feed and fertiliser prices are likely to increase.

The predominant system of lowland sheep production is mid-season lamb and the trend in profitability of this system is shown in Table 4.3.

Table 4.3: Gross margin (€) per ewe, mid-season lamb 1996-2003

1996	2000	2001	2002	2003[1]	2004[2]
74	61	89	74	70	66

Source: Teagasc National Farm Survey
[1] Estimate, [2] Forecast

The data show that whilst there is considerable variation between years, the overall trend is static returns to sheep production in current terms with no allowance for inflation and loss of purchasing power.

The trend output, cost and gross margins per ha for the main lowland system is shown in Table 4.4 for farms on the better soils.

Table 4.4: Trend in output, costs and margins (€/ha), mid-season lamb, 2001-2004.

	2001	2002	2003	2004
Gross output	1078	1008	981	964
Direct costs	302	321	328	344
Gross margin	777	687	653	620
Overhead costs	225	214	220	220
Net margin	552	473	433	400

Source: Teagasc National Farm Survey
[1]Estimate, [2]Forecast

Both gross and net margins are estimated to decline in the current year and this will continue in 2004. It should be pointed out that headage payments are not included in these margins, as since 2001 headage is paid on a farm basis and therefore not linked to a particular livestock enterprise.

Acknowledgements

Data supplied by Department of Agriculture and Food, Central Statistics Office and Bord Bia were used in compiling these estimates. Thanks are due to G. Quinlan, M. Roche and D. Kelleher for provision of NFS data and for technical assistance. Valuable comments and observation provided by G. Scully, A. Kinsella and P. Clarke are also acknowledged.

Situation and Outlook Conference 2003
Pigs

M. Martin

Introduction

Throughout 2003 pig prices have been frequently below the average cost of production. There are expectations of improved pig prices after the first quarter of 2004. However, there will be a substantial increase in feed costs due to the increase in the price of feed ingredients.

Supply

EU
Sow numbers at 10.983m in December 2002 were largely unchanged compared with December 2001 (10.968m). The 6 main EU pig producing countries command 78.5% of EU sow numbers (Table 5.1).

Table 5.1: Trends in sow numbers in main EU pig producing countries

Country	Sow Herd (Dec. '02) (000)	% EU Herd	Change 2002/2001
Spain	2328	21.2	-0.4
Germany	2260	20.6	+0.4
Denmark	1141	10.4	+2.0
France	1215	11.1	+2.1
Netherlands	999	9.1	+2.1
Italy	693	6.3	-3.9
UK	520	4.7	+4.2

-
Only Italy (+3.9%), France (+2.1%) and Denmark (+2%) show a significant increase in the sow herd over the year. These increases are largely offset by reductions in the Netherlands (-2.1%) and United Kingdom (-4.2%).

There is likely to be little overall change in pig supplies from the existing EU-15 in 2004.

Candidate Countries

In December 2002 total pig numbers in EU were 121.462m head. In the 10 candidate countries the total number was 32.222m. This is an increase of 26.5% on the existing EU pig herd.

Table 5.2: Pig population in EU Candidate Countries (Dec. 2002)

Country	No.of Pigs (000 head)	% of Total
Poland	18997	59
Hungary	5082	16
Czech Republic	3505	11
Slovakia	1554	5
Lithuania	1061	3
Slovenia	656	2
Others	1367	4

Poland is, by far, the biggest pigmeat producer among the applicant countries and will add 15.7% to total EU pig numbers,

UK
In June 2003 the UK sow herd had declined to 510,000 sows and served gilts – down 8.6% on June 2002. Since June 1998 the UK sow herd has declined from 778,000 to 510,000 or by 34.5%.

UK supplies of pigmeat will decline further in 2004 leading to an increase in imports.

Ireland
The June 2003 Pig Enumeration (CSO) showed a decline in the sow herd of 4% to 154,300 compared to June 2002.

Table 5.3: Trends in the national sow herd 1999 – 2003
(June Enumeration)

Year	Sows/Served Gilts (000)	Change on Previous Year
2003	154.3	-4
2002	160.7	-1.7
2001	163.5	+2.7
2000	159.2	-7.2
1999	171.5	

Source: Central Statistics Office

The Teagasc survey of commercial pig units (Jan. 2003) showed that there were 510 commercial herds with 160360 sows. Very few sows are now kept in units of less than 100 sows.

Table 5.4: Structure of national breeding herd: 2003

Herd Size	No. of Herds	% of Sows
1000+	33	32.7
500-999	70	28.4
300-499	60	14.1
200-299	94	14.0
100-199	96	8.4
<100	63	2.4

Source: Teagasc Pig Service

In Northern Ireland there has been a further decline in sow numbers contributing to a decline in the breeding herd on the island.

Table 5.5: Trends in sow numbers in the Republic and Northern Ireland 1997 – 2003 (000's)

Year	Republic	N. Ireland	Total
1997	174.4	71.0	245.4
1998	170.2	66.9	237.1
1999	171.5	47.1	218.6
2000	159.2	41.8	201.0
2001	163.5	42.6	206.1
2002	160.7	40.2	200.9
2003	154.2	36.9	191.1

Sources: Central Statistics Office,
Dept. of Agric. and Rural Development for Northern Ireland.

Sow numbers on the island have declined by 22% over the last 6 years. This has led to a significant reduction in weekly pig slaughterings on the island**.**

Table 5.6: Pig slaughterings in Republic and Northern Ireland 1999 – 2003

Year	Total Number (millions)	Number per Week
1999	4.614	88722
2000	4.310	82892
2001	4.191	80596
2002	4.264	81995
2003 (39 weeks)	3.129	80238

Source: Bord Bia

To the end of September 2003 the weekly pig slaughterings in the Republic averaged 55,000 compared with 25,200 in Northern Ireland. These figures indicate that at least 10,000 pigs per week are being exported to the North for slaughter.

Supply Prospects

Pig slaughterings on the island are likely to fall to about 4.16m for 2003. It is projected that slaughterings in 2004 will decline further to about 3.925m head. If the Northern Ireland kill is maintained at 25,000 pigs per week the kill in the Republic could fall to 50,500 pigs per week.

The decline in pig slaughterings is likely to be partially offset by increases in pig slaughter weight. Slaughter weights in the Republic have increased steadily in recent years.

Table 5.7: Pig slaughter weights in Ireland 1997 – 2002

Year	Average Deadweight kg
1997	67.5
1998	67.7
1999	68.4
2000	68.1
2001	69.6
2002	70.8

Source: Teagasc Pigsys Report 2002

The weight above which price penalties apply at the main slaughtering plants is currently about 85kg deadweight. Further increases in slaughter weights are still achievable.

Consumption

Average consumption of pigmeat per capita in the EU is 42.6 kg. Consumption in Ireland is 38.1 kg.

Table 5.8: Trends in pigmeat consumption kg per head

Year	EU	Ireland
1995	40.5	37.8
2002(est)	42.6	38.1

Source: Eurostat

Pigmeat imports into Ireland in 2002 declined slightly to 42,000t. Pigmeat exports amount to 129,500 tonnes. Live pig exports in 2002 are estimated to equate to about 240,000 tonnes of carcass weight.

Table 5.9 shows the approximate pigmeat supply balance for 2002.

Table 5.9: Pigmeat supply balance for Ireland 2002

	000 Tonnes
Total Production	256
Imports	+42
Exports-Pigmeat	-129.5
Exports-Live Pigs	-25
Consumption	143.5

Pig Prices

The EU average price per kg deadweight Jan. – Sept. 2003 was 128.8c.

Table 6.1: Average pig prices in EU and selected countries Jan. – Sept. 2003

Country	Av. Price c/kg	Price % of EU Average
EU- 15	128.8	
Denmark	108.4	84.2
Netherlands	115.4	89.6
Ireland	121.6	94.4
France	124.8	97.0
Germany	130.6	101.4
UK	149.7	116.2

Source: Bord Bia Market Monitor

Danish prices have been especially hard hit by difficulties with exports to Japan due to currency fluctuations.

The EU average of 128.8c per kg is the lowest for the last 4 years.

Table 6.2: Average EU pigmeat price 2000 – 2003

Year	Price c per kg
2000	142.1
2001	167.3
2002	135.6
2003 (39 Weeks)	128.8

The average price per kg realised by producers Jan. – Sept. 2003 was 123.9c per kg. It is unlikely that the price for this year will exceed 125c per kg. This is the lowest average price since 1999.

Table 6.3: Average producer price for pigs: 1994 – 2003

Year	Price c per kg deadweight
1994	127.8
1995	142.6
1996	164
1997	143.1
1998	133.5
1999	102.2
2000	129.05
2001	148.3
2002	129.8
2003 (proj)	125

Source: Teagasc Monitoring Pig and Feed Prices

Price Prospects

Pig prices are currently about 130c per kg (November 2003). There is an on-going demand for live exports to Northern Ireland reflecting the shortage of UK pig supplies. EU forecasts are for improved pig prices from the second quarter of 2004.

Production Costs

The average cost of production per kg deadweight was 119.9c in 2002.

Table 6.4: Production Costs in Ireland: 2002

Cost	c per kg
Feed	81.3
Common	30.8
Herd Specific	7.8
Total	**119.9**

Source: Teagasc Pigsys Report 2002

Compound feed prices are currently (Oct. 2003) about €10 per tonne higher than the average price in 2002. This increases production costs by 3.7c per kg.

Management /labour costs are second only in importance to feed at 13.4c.

Table 6.5: Breakdown of common costs – 2002

Cost	c per kg
Management/Labour	13.4
Healthcare	4.3
Heat/Power/Light	3.3
Repairs	2.2
Transport	1.1
Stock Depreciation	1.1
Manure	1.0
Insurance	0.9
AI	0.7
Office	0.4
Miscellaneous	2.2
Total	**30.8**

Among the Herd Specific costs Building Depreciation is 5.7c per kg. The balance is Interest at 2.1c per kg.

Actual loan repayments (capital + interest) work out at 6.7c per kg.

These production costs do not include any Return on Investment. This is the return on assets owned in the business i.e. total assets less liabilities. Typically, this figure should be about 5c per kg based on a net investment of €1550 per sow and 5% interest rate. The cost of developing a unit today is well in excess of €3000 per sow.

Cost Prospects

Pig feed ingredient prices are currently considerably higher than last year.

Table 6.6: Pig feed ingredients prices ex-store 2002 – 2003.
€ per tonne

Ingredient	October2002	October 2003
Barley	112	135
Wheat	112	154
Soya	243	240

Source: Cereals Association of Ireland

October 2003 prices would indicate a rise of about €25 per tonne in pig feed price based on the same inclusion rates for these ingredients. A further increase in feed prices on top of the €10 per tonne rise in October 2003 is expected.

Pig producers will be required to end the use of tether systems by 1st Jan. 2006. In May 2002, about 42% of dry sows were in tethered stalls. Producers will be required to make substantial investment to comply with the legislation and, especially, if converting to loose housing as required from 1st January 2013.

As more pig units are required to obtain an IPC/IPPC licence the costs involved in obtaining and complying with the conditions of licensing will rise. The implementation of the Nitrates Directive is also expected to lead to a substantial increase in the costs of manure handling.

While the scarcity of skilled personnel to operate units has not been resolved the employment of non-nationals has prevented a severe labour shortage. Improved labour efficiency and improved technical efficiency has contributed to controlling labour costs per kg deadweight produced.

Table 6.7: Technical efficiency on Irish pig farms 2001 – 2002

	2001	**2002**
Average Herd Size	380	452
No. Pigs produced per sow per Year	21.4	21.9
Weaning to Sale: Av. Daily Grain g **Feed Conversion**	586 2.43	597 2.37
Slaughter Weight Kg dead	69.6	70.8

Source: Teagasc Pigsys Report 2002

With little capital investment, at present, building depreciation costs are likely to decrease. This is not sustainable in the long-term. Many units are in need of major capital investment.

Conclusion

Profitability in pig production in 2003 has been poor. Substantial increase in feed costs are anticipated. While pig prices are expected to rise in 2004 much of this will be eroded by increased production costs.

Situation and Outlook for Tillage 2003/04

F.S. Thorne and P.W. Kelly

Introduction

The 2002/03 crop year was marked by substantially different circumstances from the previous year. It now appears that risk and uncertainty are becoming issues with which tillage farmers must deal with on an ongoing basis. Weather, production and price uncertainty are becoming more the norm rather than the exception. Mason (2003) said that ' experiences in the last three year seasons and the outlook for 2004/05 have made it clear that price and income volatility is with the industry for good' (p.1).

As we have seen in previous years, issues within Ireland and on the international market affected the situation in 2003 and will undoubtedly influence the outlook for 2004. On the domestic front the main issues of concern were weather conditions which impeded the sowing of winter crops, but weather conditions at harvest in 2003 were the best that have been seen for a number of years. Another major issue on the domestic front, is the overshoot of the National Base Area (NBA). This has had quite severe financial implications for maize growers, in that arable aid payments are to be cut by nearly 100%, whereas cereal growers escape with a much less severe cut in arable aid payments of less than 1% in 2003.

On the European front, production levels of feed grains were remarkably low, primarily due to unfavourable weather conditions. This reduction in the level of supply caused prices to increase considerably from their 2002 level.

The issues to be discussed in this paper relate to the situation and outlook for tillage crops in 2003/04. In particular, price developments, national base area claims, crop area, yields and quality, and finally the influence of these developments on the gross margin of individual crop enterprises on Irish farms.

Price Developments

The cereal price story is perhaps the most significant story of the 2002/03 production year. Compared to Autumn 2002 when there was concern about low grain prices, 2003 prices for cereals have been considerably higher than those received in 2002. This price increase occurred largely because of the low levels of grain available in Europe**,** due mainly to poor weather conditions in the Former Soviet Union (FSU) states during crop planting and development**,** and a drought that subsequently affected Western Europe. The consequence of these conditions was a decreased level of production, particularly in the European feed grains market.

As a result, in Ireland in Autumn 2003, the price paid at farm gate for feed barley at 20 per cent moisture was €101 per tonne, compared with €89 per tonne in 2002 and feed wheat prices in Autumn 2003 were on average €111 per tonne, compared to €92 per tonne last year. The biggest increase was evident for wheat. This returned the familiar price differential between wheat and barley prices that was less evident at the 2002 harvest.

While these production deficits have led to higher European grain prices in Autumn 2003, there are a number of issues, which could influence future price developments.

European cereal stocks are well down on recent years, but this is not the case in other parts of the world where production is estimated to be greater than in 2002 (Mason, 2003). In the event that the dollar further weakens against the Euro, imports of grains and feedstuffs into Europe could be more competitive, thus affecting internal grain prices in Europe.

Furthermore, during the next production year, grain prices will be even more sensitive to crop conditions, due to low end of season stocks this year. Mason (2003) warned that due to low end-season stocks in major producing regions this year '2004/05 is likely to be a defining year for the world grain market, with prices even more sensitive to weather in key producing regions throughout the world' (p.1).

In addition to cereal prices, the price for sugar beet also shifted somewhat during 2003, with the 'on account price' per tonne in early November at €45 for sugar content at 16%. The price for 2004 is set to remain at the 2003 level. The price for main crop potatoes also shifted this year with prices lower than 2002 levels.

National base area claim

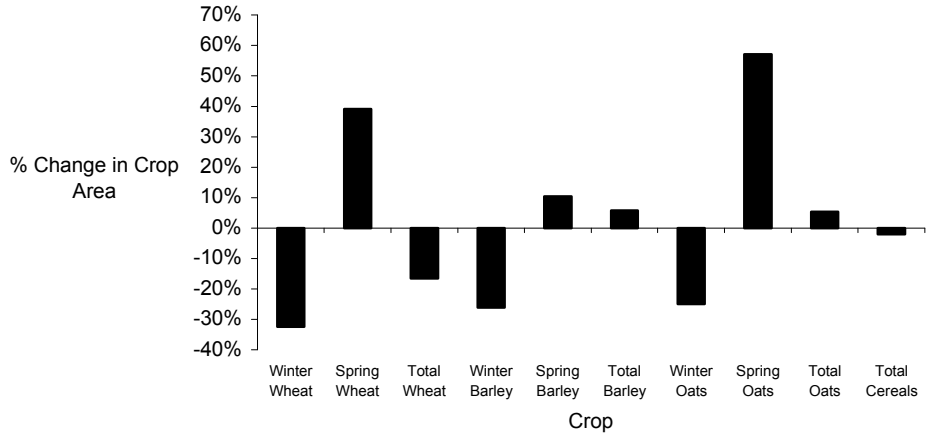
There was an overshoot of the national base area (NBA) claim for arable aid crops in the 2003 production year. This overshoot has implications for the area aid rate payable for all crops.

As a result of this overshoot, there will be a reduction in the aid paid for maize production this year, from €365.40 per hectare in 2002 to €4.93 per hectare in 2003. This reduction in aid for maize is made because of an arrangement to 'ring fence' the aid claim for maize, (which is only allowed 200ha of the National Base Area (NBA) of 345,500ha plus any shortfall arising from under utilisation of the NBA by other crops). Consequently, maize is the first to suffer a cut if the NBA is exceeded. As a result over 2,000 farmers who claimed area aid on 14,804 hectares of maize this year will receive the reduced rate of payment in respect of these claims.

In addition to the cut in maize payments there will also be a slight reduction in payments to cereal, oilseed and protein producers. The excess of applications amounted to an overshoot of 300 hectares. Consequently, the rate of payment for cereals (including mixtures of cereals, oilseeds, linseed, Hemp and Flax grown for fibre) in 2003 will be reduced from €383.04 (in 2002) to €382. 70 per hectare. The rate of payment for protein crops will also be reduced from €440.80 (in 2002) to €440.40 per hectare this year.

Crop area
Estimates of crop area estimated from seed sales are shown in Figure 7.1 below.

Figure 7.1: Percentage Change in Crop Area from 2001/02 to 2002/03 crop year



Source: Adapted from Tillage Crops Report No.11

Figure 7.1 shows that the areas of all winter sown crops decreased in the 2002/03 crop year, probably as a result of the poor planting conditions in Autumn 2002. However, spring sown cereals were well up on the previous year, but this was not enough to compensate for the reduction in winter crops. Consequently, the estimated total cereals area in 2002/03 was less than in 2001/02.

Yields and quality

Despite the fact that the area of total cereals was down slightly in 2003 compared to 2002, total cereals production in 2003 was estimated to be up slightly on last year due to an increase in average yields. A comparison of estimates of yields for the harvests of 2001, 2002 and 2003 is shown in Table 7.2. This table shows that the estimated average yield for all cereal crops, except winter wheat, was higher in 2003 than in 2002, but less than those achieved in 2001. The yield decrease for winter wheat in 2003, on top of the low base in 2002, was one of the main disappointments for this years harvest.

Table 7.2: Estimated cereal yields 2001, 2002, 2003 (Tonnes per hectare)

	2001	2002	2003
Winter barley	7.9	6.6	7.8
Winter oats	7.9	7.8	8.2
Winter wheat	9.9	8.8	8.4[1]
Spring barley	6.9	5.3	6.3
Spring oats	6.7	5.9	7.1
Spring wheat	7.9	7.2	7.3

Source: Teagasc Harvest Report No.1,
[1]revised estimate

Overall cereal quality[2] in 2003 was better than in 2002. Winter and spring barley quality was assessed as "excellent". Winter wheat quality was considered quite "acceptable", despite the fast rate at which crops ripened towards the middle of the harvest which resulted in shrivelled grain in many crops. Spring wheat quality was considered very good. Winter and spring oat quality was "excellent" (Teagasc 2003).

Although the yield and quality of grain was generally better in the 2003 harvest than in 2002, straw yields were lower in 2002, but quality was very good. The level of demand for both barley and wheat straw was 'poor'.

In relation to sugar beet, in mid Autumn 2003, estimates indicated that yields were up on 2002, with average yields of 45 tonnes per hectare and average sugar content at 17.4% which could increase before the end of the sugar beet campaign. These yields compare to 42 tonnes per hectare in 2002 (CSO, 2002).

Yield estimates for main crop potatoes, from the Bord Glas/Teagasc sample potato digs, indicate that yields in 2003 are slightly down on 2002. The saleable yield for Roosters in 2003 were estimated at 38.5 tonnes per hectare, compared to 38.9 tonnes per hectare in 2002. The dry weather conditions in early Autumn had a negative influence on tuber development, which has resulted in an increase in undersized tubers (< 45 mm).

Cereal production

The production of cereals, shown in Table 7.3, has been estimated by combining data for yield and area harvested.

Table 7.3: Estimated cereal production in 2002 and 2003 ('000 tonnes)[1]

	2002	2003	Change (%)
Wheat	868	687	-21
Barley	963	1197	+24
Oats	133	151	+14
Total	1,964	2036	+ 4

[1] *Authors' estimates*

Table 7.3 shows that overall cereal production increased in 2003 from its 2002 level. This occurred despite the fact that total cereals area was down on last year. Therefore, the increase in production witnessed this year is attributable to increases in yield rather than area.

Gross margins

Trends in gross margins for the main tillage crops between 2002 and 2004 are shown in Table 7.4.

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

Table 7.4: Trends in gross margins for the main tillage crops 2002 to 2004 (€ per hectare)

	2002[1]	2003[2]	2004[3] (@ 90% confidence)		
			Low	Mean	High
Winter wheat	650	809	597	724	871
Winter barley	533	741	517	585	672
Winter oats	628	787	423	575	675
Spring wheat	503	653	328	660	775
Malting barley	487	676	461	568	683
Spring feeding barley	351	506	342	452	565
Spring oats	547	754	328	517	613
Sugar beet	1044	1279	1198	1299	1487
Potatoes	3844	2783	1507	3182	5190

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

The estimated gross margins of all crops, except potatoes, increased substantially in 2003, compared to 2002. A combination of increased yields, low moisture content and increased prices over 2002 brought this about. This increase in gross margin occurred despite a slight increase in costs and a decrease in direct payments.

A new departure for the 2004 forecast is the incorporation of the reality of risk in projecting gross margins for crop production. The gross margins forecast for 2004 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 further detail on the importance of risk analysis in crop production). The 'mean' gross margin forecast for most crops in 2004 show a decrease on 2003. However, each is a point estimate and there is a certain element of risk associated with these estimates. Therefore, a 90% confidence interval was placed around these estimates to show with 90% confidence what the gross margin return for each crop is likely to be in 2004, based on historic yield distributions crop production (see Appendix I for.

The assumptions for the 2004 forecasts are that yields similar to the historic distribution of yields could occur, cereal prices decrease from their high level in 2003, but do not return to the low levels reported in 2002, due to reduced market supplies in Europe. 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.

Sugar beet gross margin in 2003 is estimated to increase slightly as a result of a yield and price increase from 2002. In terms of the forecast for 2004, any yield distribution from the historic distribution of yields is assumed likely to occur and price is forecasted to remain similar to that received in 2003.

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. For 2004 the gross margin is forecast with 90% confidence to be within the range €1507 and €5190. 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.

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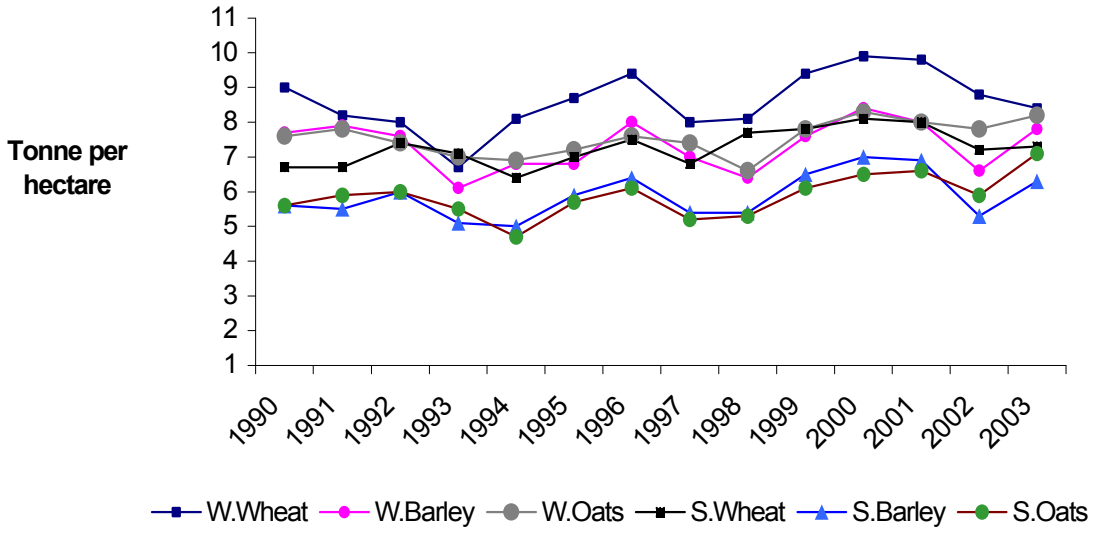
Appendix I

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 de-coupling 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 7.5 below shows the variability of crop yields from 1990 to 2003.

Figure 7.5: Cereal Yields (1990 – 2003, yields per hectare)



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

Figure 7.5 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[3]. These results indicate that there is a relatively large element of risk associated with crop production, which cannot be controlled by the producer.

[3] 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.

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