

Situation and Outlook 1999/00

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Review and Outlook for Dairying

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Dairy farmers experienced a significant fall in margins from milk production in 1999. This was mainly due to lower milk prices, reduced calf values and an unexpected rise in some production costs. Although the weather in 1999 was in general much better than 1998, some adverse conditions at a critical period, near peak milk production, resulted in an unplanned increase in feed expenses.

The outlook for Irish dairying in 2000 is that very similar margins to those for 1999 will be earned by milk producers. As dairy product prices will again be intervention-related, Irish milk prices will be mainly determined by the same outlets used in 1999. Overall costs of production on dairy farms should remain at 1999 levels. Thus gross margins and net margins per gallon of milk produced will remain 9 per cent to 13 per cent below 1998 levels.

Review of 1999

Financial margins from milk production fell as expected in 1999. Estimated gross margins per cow and per hectare (see Table 1.1) show a reduction of over 9% compared to 1998. The fall of about 3.6 pence per gallon in the average price paid for manufacturing milk was the main explanatory factor in the decline in margins. However, substantial reductions in calf prices and an unexpected increase in direct costs also contributed to the downturn in margins.

Table 1.1: Gross output, direct costs and gross margin creamery milk (good soils) per hectare and per cow

	1998	1999 ¹	2000 ²
		£ per ha	
Gross output	2,224	2,102	2,094
Direct costs	675	696	694
Gross margin	1,549	1,406	1,400
		£ per cow	
Gross output	1,066	1,008	1,004
Direct costs	323	334	333
Gross margin	743	674	671

Source: National Farm Survey and own estimates

¹Estimated

²Forecast

The decline in milk prices in 1999 was not as severe as it might have been following the sizeable fall in dairy product prices in the latter months of 1998 and in view of the weak international markets facing exporting countries going into 1999. Increased use of sales to intervention, as an outlet for Irish butter and skim powder (SMP), underpinned milk prices paid to Irish producers this year. Following the introduction of the fixed euro conversion

rate on 1 January 1999 and with butter and SMP trading at their intervention equivalent levels for much of the year, the Irish Dairy Board's on-account prices remained stable for much of the year. In more recent months increased demand for SMP (and WMP) has resulted in some improvement in EU market prices. It is not clear whether the higher prices for milk powders are sustainable as, with the exception of the recovery of demand in South East Asia and increased sales to North Africa, two key factors influencing the firmer prices in the second half of 1999 were the increased demand for non-Belgian product due to the dioxin issue and a weak euro/dollar exchange rate. An expansion in the production and sales of Irish cheese in 1999 may also have made a positive contribution to the maintenance of Irish milk prices. The sustained strength of sterling provided Irish cheese exporters with an incentive to expand production and exports to the UK. However, with other EU exporting countries also benefitting from the boost to trade derived from the weak euro, the British market for dairy products has been very price competitive.

Weather conditions encountered on dairy farms in 1999 were much improved. But a combination of some carryover effects relating to winter forage supplies from 1998 and the adverse conditions for grazing in late April/May has caused a further increase this year in the volume of purchased feed used on dairy farms. Fortunately the price of dairy ration has fallen by about 5 per cent and it is assumed, at least on dairy farms with good soils, that the price reduction would largely counteract the value of the extra quantity fed. Thus purchased feed costs per cow and per gallon in 1999 are very similar to the outturn for 1998. Reported increases in fertiliser prices and silage making charges would indicate a notable increase in forage feed costs. Other non-feed costs are assumed to have increased in line with inflation except in the case of energy related costs which increased faster. Thus, total direct costs for milk production are estimated to be up by about 3.5 per cent this year.

Outlook for 2000

There are very few indicators at present that EU dairy product prices might show any appreciable improvement next year. Instead there are more factors indicative of product prices continuing at their intervention equivalent levels and therefore the main determinant of Irish milk prices in the year 2000. The initial Agenda 2000 increase in milk quota deliveries of 0.8 per cent next year will add to product disposal pressures. Will the euro stage a major recovery against the US dollar next year and reverse the competitive advantages and lower costs of disposal on external markets? Where and at what prices will New Zealand dispose of extra products from what appears at this stage an increase of over 8 per cent in milk supplies in the year to end May 2000? In 1999, the EU aid package to Russia absorbed about 50,000 tonnes of SMP from the EU. Where does this volume of SMP find an outlet next year?

On the positive side, there has been a significant growth in SMP use in the EU calf feed market in recent months and this market is expected to show continued growth next year. The markets for milk powders in SE Asia are also reported to be in strong recovery mode. Some recovery in the Russian market for EU cheese exports is also expected in 2000. However there is no real expectation for any major upward shift in the demand for butter on external markets. In summary, EU dairy product prices with respect to the Irish product mix are likely to remain at similar levels to those in 1999 for the next year and so milk producer prices should be virtually unchanged.

The erosion in calf prices over the last three years is equivalent to a fall in returns of 4 pence per gallon since 1996. It is not expected that calf prices will decline any further in 2000. In fact some recovery in calf prices could occur if the fall in cow numbers reported recently leads to a substantial reduction in the number of calves born and marketed next Spring. Given good supplies of winter forage on dairy farms and normal weather conditions in 2000, costs should be at least contained or even reduced on dairy farms next year. Cost savings are anticipated from an expectation that both the price and volume of concentrates used in milk production will be low next year. However increases in the costs of other items may neutralise the expected savings in purchased feed.

The expected results for 2000 for gross output, direct costs and gross margins per cow and per hectare are shown in Table 1.1. It is clear from the data that the expected results in 2000 for each of the measures cited are almost identical with the estimates shown for this year. This would leave gross and net margins per gallon in 1999 and 2000 respectively 9 per cent and 13 per cent below those achieved in 1998.

Review and Outlook for Beef

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Most cattle farmers would prefer to forget about 1998 and 1999 as margins were under considerable pressure due to a sharp decline in beef prices and a fodder scarcity resulting in beef price-feed cost squeeze. This time last year the two major difficulties in preparing this report were (i) how much of the extra feed cost to allocate to the individual years 1998 and 1999 and (ii) to dis-aggregate estimated overall outcome for the entire cattle sector and allocate the impact of the sharp decline in cattle prices to inter-farm costs and margins. This uncertainty is at least reduced once the data for 1998 became available from the Teagasc National Farm Survey (NFS) for the individual cattle systems. These results and comparable data for the three previous years are presented in Tables 2.1 to 2.3 below.

The fallout from the BSE crisis of 1996 continued to have a negative impact on the cattle trade and prices in Ireland in 1998. The situation was further compounded by the collapse of the Russian market in the autumn of 1998 and the continued exclusion of Irish beef from a number of other markets. This resulted in a sharp decline in prices in the latter half of the year. The only bright spot for cattle farmers was the high export demand for quality weanlings to Spain and Italy.

The market situation for cattle in Ireland was further exacerbated by the combination of large cattle inventories, prolonged and wet spring, poor grazing season and very limited winter feed supplies relative to requirements. The sharp decline in cattle prices and the tight feed situation led inevitably to an element of panic sales towards the end of 1998 and in early 1999, especially for poorer quality cattle.

In the autumn of 1998, the Minister for agriculture decided to increase the pay-out of the first moiety of the suckler cow and special beef premiums from 60 per cent to 80 per cent in order to increase cash flow and assist farmers with the purchase of feeds and to help sustain incomes in 1998. For the farmers with “eligible animals” increasing the size of the first moiety helped to maintain incomes in 1998, essentially, by borrowing revenue from 1999. But this was of very limited value to farmers operating production systems which were more market oriented and had limited reliance on eligible animals and related payments. Many of these farmers had both lower output prices and higher feed costs. Cattle farmers in certain regions did, however, obtain some respite from the “fodder crisis” payments.

The main focus of this review is on how lower cattle prices, higher costs and other factors affect the margins and incomes of cattle farmers. However, it is worth noting that cattle prices in Ireland in late 1998 and throughout 1999 were over 20 per cent lower than they were before the BSE crisis. Apart from the income aspect, an equally worrying feature for many cattle farmers is the impact of another sharp decline in cattle prices on the value of cattle as an asset and the overall net worth of all cattle herds.

Review of 1998

The results from National Farm Survey (NFS) for 1998 show that the overall gross margin per hectare, at £401, was in line with the expectations this time last year. Because of the timing of the price collapse in the autumn of 1998, it was anticipated that there would be a differential impact on the margins for different cattle systems.

The NFS results show that compared to 1997, the margins for 1998 for the farmers involved in cattle rearing declined but increased for cattle finishers (Table 2.1). As will be demonstrated below, these differences are mainly due to the effect of the timing of the cattle price reduction and adjustments made to the pay-out of direct payments. The largest decrease occurred on farms involved in “rearing on dairy farms”, a decrease of £80 but the largest increase arose in “weanlings to stores-finish”, an increase of £96. The changes were more modest for “single suckling” a decline of £29, and for the “stores to finish” system, an increase of £33.

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

	1995	1996	1997	1998
Single Suckling	385	414	400	371
Rearing – Dairy Farms	565	537	543	463
Weanling to Store/Finish	351	378	334	430
Stores to Stores/Finish	360	357	336	369
All Cattle Systems	444	441	431	401

Source: Teagasc, National Farm Survey

A somewhat different picture emerges when the direct payments are excluded and the market based margins are calculated (Table 2.2). The market based margin for “all cattle systems” declined by £49. This is considerably higher than the decline of £30 for the overall gross margin presented in Table 2.1 above. The market based margin for “single suckling” declined by £54 and that for “rearing on dairy farms” by £82. This reflected the decline in the price and value of the animals being sold from these systems. In contrast, the lower cost of animals being purchased by the “weanlings to stores-finish” and the “stores to stores-finish” systems increased their market based margins by £46 and £9 respectively.

Table 2.2: Trends in Market-based Gross Margin (£/ha)

	1995	1996	1997	1998
Single Suckling	182	152	174	120
Rearing – Dairy Farms	369	311	326	244
Weanling to Store/Finish	181	151	140	186
Stores to Stores/Finish	182	127	116	125
All Cattle Systems	254	200	211	162

Source: Teagasc, National Farm Survey

A number of aspects of the dynamics of the cattle sector, as it operates in Ireland, become evident when the margins in Tables 2.1 and 2.2 are evaluated simultaneously. Firstly, the overall outcome for 1998 masks a considerable diversity of changes in the margins between winners and losers within the cattle sector.

Secondly, the timing of the price collapse has a major influence in defining who are the winners and losers. If the price decline occurs in the late summer-autumn, as in 1998, cattle rearer's lose and fatterer's gain. In this situation the fatterer's, have the option of replacing existing animals with cheaper ones, unless, they are exclusively involved in summer grazing. However, the reverse is true if the price collapses in the early part of the year as in 1996, where they had purchased at the high price and were selling at the low price.

Thirdly, there are wide differences between the systems in their capacity to absorb price fluctuations. The margins for breeding to rearing systems, like single suckling, have to absorb the full effect of a price reduction since they do not purchase animals like the "trading" or fattening systems. Also, the asset value of their breeding herd declines as the margin for the system declines. Furthermore, the capacity of the single suckling system to absorb the decline in margins and asset value is low when compared to "rearing on dairy farms" where the cattle margin is ancillary to the milk enterprise and the asset value of the breeding herd is largely unaffected.

Fourthly, advancing the pay-out of the direct payments is a very crude mechanism for supporting incomes because those who are most affected by the price collapse are often least compensated by the direct payments. And, in any event, the producers who get the larger advance payment are only "borrowing" from their payment entitlements for the following year because there is no overall increase in the revenue from direct payments.

The following examples illustrate the situation in 1998. The largest decline in margins were recorded for the system "rearing on dairy farms" as these farms were more sensitive to the decline in cattle prices because they obtain most of their margin from the market. Since they were less reliant in direct payments they had only limited income protection from the extra pay-out of revenue from direct payments. In contrast, some of the farmers involved in single suckling avoided the worst effects of the price decline provided they produced good quality weanlings and, in any event, they obtain about two-thirds of their margin from the direct payments.

For the finishing systems a somewhat similar situation prevails. Table 2.1 shows that for the "weanlings to stores-finishing" system the overall gross margin increased by £96, but £46 of this increase, or almost half, arose from an increase in the market based margin (Table 2.2). In contrast, for the more mature animals in the "stores to stores-finish" system the overall increase was only £33, (Table 2.1), but as can be observed in Table 2.2 only £9 or 27 per cent of this was derived from the market based margin. This further illustrates how changes in prices and direct payments have a very different impact on individual cattle systems depending on the mix of animals used in the system and the degree of reliance of the system on direct payments and market based returns.

Even allowing for the lead and lag effects of the changes in the pay-out of the first moiety of the direct payments, the proportion of the gross margin derived from the market continues to decline (Table 2.3). In 1998, this had declined to 40 per cent for the "all cattle systems". This effectively means that cattle farmers as a group get only 40 per cent of their gross margin from the market but they get 60 per cent from the direct payments. And, as the situation in 1998 showed, the returns from the market can be very variable but the direct payments are almost guaranteed. With this mix of margins and risk, cattle

farmers are more likely to respond to the compliance conditions for the direct payments than to the signals from the market for beef.

Table 2.3: Market-based Gross Margin as a % of Total

	1995	1996	1997	1998
Single Suckling	47	37	44	32
Rearing - Dairy Farms	65	58	60	53
Weanling to Store/Finish	52	40	42	43
Stores to Stores/Finish	51	36	35	34
All Cattle Systems	57	45	49	40

The situation is even more bleak when the component systems are examined. Farmers involved in “single suckling” and “stores to stores-finish” get less than 35 per cent of their gross margin from the market. For these farmers, responding to the market is only half as lucrative, at least in the short-term, as compared to compliance with the conditions for the direct payments. Unfortunately, the situation is unlikely to improve under the Agenda 2000 agreement because the size of the direct payments will increase and the price of beef could decline further.

Estimates for 1999

Cattle farmers entered 1999 with very large cattle inventories, limited feed supplies, and poor cattle prices and a very uncertain outlook for the beef market. Also, as noted above, a portion of the direct payments that would normally be paid-out to cattle farmers in 1999 was advanced into 1998. Therefore, the revenue from direct payments in 1999 would be reduced by this amount unless the same system for the first moiety of the payments was operated in 1999. In the autumn of 1999, the Minister for Agriculture decided to revert to the normal pay-out of 60 per cent. This had the effect of reducing the revenue and margins for 1999 compared to 1998.

Cattle prices in 1999 firmed slightly on the low prices that prevailed in the autumn of 1998. Steer prices in 1999 fluctuated at between 10 and 15 pence per kilo below that for 1998 for the first half of the year, but prices were largely maintained for the second half of 1999 and hence ended the year at a higher level than in 1998. For the year as a whole it is likely that the average steer prices in 1999 will be about 4 per cent lower than in 1998. While the seasonal pattern of cull cow prices was similar to that for steers, the price reduction in 1999 was larger and the recovery over 1998 in the autumn did not materialise. It now looks like cow prices will be down by over 10 per cent on 1998.

For the individual farmer, there was a considerable spill-over of feed costs from 1998 into 1999. This mainly arose from the need to purchase a much increased volume of concentrates due to an earlier than normal rundown of fodder inventories. A carry-over of delayed payment for purchased feeds was also likely to be involved. All this and a late spring added considerably to the costs, especially in the first half of the year. But grass growing conditions were generally good for the rest of the year and a mild autumn resulted in an extended grazing season which helped to contain feed costs.

The prices for calves and young animals were down by about 15 per cent on the previous year and were particularly low for heifers and poor quality animals. This is likely to have

reduced the margins for farmers involved in cattle breeding-rearing but could again have benefited those involved in systems using more mature animals.

The main and probably the only significant bright spot for the cattle sector in 1999 was the export trade in weanlings. Beginning in the second half of 1998 and continuing throughout 1999, there was a particularly strong demand for good quality weanlings from the EU markets. At this stage it looks like the export of calves and weanlings for 1999 will be well over a quarter of a million animals and close to double the level of trade for 1998. The live trade to Third countries has also increased by a similar percentage, but compared to the internal EU trade the actual number of animals involved is relatively small.

For farmers lucky enough to be producing the good quality weanlings for the EU market the prices and margins were generally good in 1998 and 1999. However, the rapidly escalating scale of this trade has a number of implications over the next few years. These include the costs and margins for other cattle farmers in Ireland, the ability of the country to draw down EU direct payments over the next few years, cattle supplies and costs for meat processors in two to three years hence, and the overall ability of the Irish cattle sector to provide the type of beef quality for the markets that appear to be emerging in continental EU.

The reduced direct payments and the lower cattle prices will combine to reduce the estimated revenue per hectare for cattle farmers in 1999, (Table 2.4). Also, costs are likely to be higher due to the strong increase in the volume of feed purchased in the spring of 1999. Consequently, the overall margin is estimated to have decreased by almost £80 per hectare (or 20 per cent) compared to 1998 which was also low compared to recent years. However, farm receipts, margins and cash flow may be higher than those presented in Table 2.4 due to the considerable de-stocking that took place in 1999.

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

	1996	1997	1998	1999 ¹	2000 ²
Revenue	719	684	663	593	646
Direct Costs	278	252	262	271	259
Gross Margin	441	431	401	322	387

Source: Teagasc, National Farm Survey and author's estimates

¹estimate

²forecast

The estimated margin for 1999 is the lowest since 1990 and similar to the margins that prevailed in the late 1980's. As already discussed in relation to the out-turn for 1998, this overall figure for 1999 masks a wide diversity of outcomes for farmers who specialise in the different cattle systems.

Cattle slaughterings and exports were considerably higher in 1999 compared to 1998. It is also likely that the slaughter weights declined. The high level of slaughterings was partly due to the large carryover from 1998 and a considerable element of de-stocking in 1999. The number of animals slaughtered increased for all categories of cattle but well in excess of 100,000 extra heifers were slaughtered. This suggests that the expansion of the breeding herd has ceased or may even be reversed. There was a particularly strong export trade for weanlings throughout 1999 and the exports for the year could be double that for 1998.

It is estimated that the aggregate value of cattle sold off-farms in 1999 could have increased by up to 10 per cent compared to 1998. This is due to the combined effect of changes in the mix of animals sold, the related de-stocking of farms, the increased numbers slaughtered and exported, the reduced slaughter weights and prices. The de-stocking will contribute to cash receipts for 1999 but it also reduces the asset base for future years. The de-stocking arising from both the high level of live exports of young animals and the increased slaughterings of the breeding herd has clear implications for the volume and mix of cattle supplies for both slaughtering and export in the year 2000 and beyond.

Outlook for 2000

Fortunately, at this stage the outlook for cattle farmers in 2000 is considerably better. It is estimated that the margin in 2000 could be £65 per hectare higher than for 1999. This is still about £30 per hectare below that prevailing in the mid 1990's. However, the actual margins for 2000 may turn out to be higher than the forecast in Table 2.4. There are a number of positive factors on the horizon but these were not included in the forecast as they are difficult to quantify. A further recovery in the margins for cattle is expected in the following year as the phased implementation of the agenda 2000 agreement begins to impact.

For the year 2000, it is anticipated that costs, particularly feed costs will return to more normal levels as the volume of purchased feed will decline. Also, an increasing number of cattle farmers are now also benefiting from the REPS payments and recycling nutrients and achieving economies with other inputs. Following the Agenda 2000 agreement, the size and scope of the direct payments for cattle are scheduled to increase over the next three years beginning in the year 2000, but the official intervention support price for beef will decline.

Somewhat lower cereal prices could arise from the agenda 2000 agreement but this is unlikely to have much direct impact on feed costs. However, this change does add an element of stabilisation to feed costs as it does provide an upper limit to fodder prices in the event of a shortage of winter feed.

Under the Agenda 2000 agreement, the stocking density compliance criteria and the method of calculating stocking densities for the direct payments have changed. In the new system all, not just eligible, animals are included. Because of the increasing importance of the direct payments in determining the margins and income in cattle farming, farmers are likely to adjust stocking rates to obtain these payments. This will likely be achieved by strategic purchases and sales of individual animals related to their impact on stocking densities, their ability to secure payments and provide market based margin.

Since the new direct payments and stocking density arrangements are being phased-in there is likely to be a learning curve for all involved. The full impact of these changes will not occur in the year 2000. Administrative lags could arise in adjusting to the new stocking density calculations and the payments themselves. This could affect the pay-out of the direct payments to cattle farmers next year.

The intervention price is scheduled to decline by almost 15 pence per kilo carcass weight, or 7 per cent, in the year 2000. A number of factors may combine to offset its negative impact on market prices. Following the sharp decline in prices at the end of 1998, Irish cattle and beef are already price competitive within the EU and have strengthened somewhat towards the end of 1999. This provides a margin of security for next year. Also, the EU intervention stocks will be extremely low by the end of 1999. Based on past experience this could translate into an increased demand for Irish beef both within the EU and for third country exports. As in the past, this could put significant upward pressure on Irish cattle prices.

Another positive feature is the gradual relaxation of the trade restrictions arising from the BSE crisis. This will facilitate trade within the EU and also help to restore consumer confidence. This could equally instil confidence in EU products in third countries and thereby restore export market opportunities for live cattle and beef. This would provide a major fillip for cattle and beef prices in Ireland.

The cattle herd in central and eastern Europe has been in decline for a number of years but this decline appears to have ceased and an element of herd rebuilding is in progress. This will have the effect of reducing beef supplies as more animals are retained for breeding. The lower supplies of beef in the region could coincide with an even small increase in demand as the Russian economy begins to recover aided by the recent increase in oil prices. Even a small increase in demand from Russia could impact on Irish prices especially in the absence of EU intervention stocks.

The shortage of animals for fattening in central and eastern Europe has precipitated a north to south trade flow of calves and weanlings in the region, i.e. from Poland, Czech Republic and Hungary into the Balkan region. This north to south trade flow is partly replacing the more traditional east to west movements into the EU. This will likely reduce the availability of these types of animals for fattening in the EU over the next few years.

Trade flows of calves and weanlings within the EU will likely be realigned for the second time in five years due to the discontinuation of the calf processing scheme. This will increase the availability of dairy type calves for veal production and these will replace the somewhat better quality calves that were being used since the introduction of the calf processing scheme. These displaced calves will revert to their more traditional function in beef production and provide extra competition for Irish weanlings on the Continent.

The scale of the changes in calf and weanling supplies in the EU and the trade from central and eastern Europe are difficult to predict. Therefore, the outlook for the Irish export trade for calves and weanlings to the Continent over the next few years must remain somewhat uncertain.

Review and Outlook for Sheep

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EU sheepmeat forecasts predict increases of 0.8 per cent and 0.6 per cent respectively in both sheepmeat production and consumption in the EU for 1999. Sheep numbers have declined by one per cent in 1999 with a similar decline in breeding ewe numbers. Production is expected to increase by over 2 per cent in the UK and to decline by four per cent in France, with Irish sheep production remaining similar to that of 1998 at 83,000 tonnes. The decline in French sheep production will lead to higher imports into France, which should have a positive effect on the Irish sheepmeat trade as 75 per cent of our lamb exports go to the French market. Lamb throughput at export meat plants to early November 1999 was 2.7 million head compared to 2.6 million for the corresponding period in 1998. Cull ewe slaughterings up to November 1999 were 384,244 head compared to 253,247 in 1998 i.e. an increase of 50 per cent. This increase is due to a carry over of cull ewes from the back end of 1998 due to poor prices and also to farmers reducing sheep numbers.

Sheep numbers have continued to decline from 1998 to 1999. Changes in ewe and flock numbers from 1993 to 1999 are shown in Table 3.1.

Table 3.1: Ewe and flock numbers 1993 – 1999 based on ewe premium applications

	Applicants claimed	Ewes claimed ('000)
1993	52,955	5,338
1996	47,113	5,006
1998	44,583	4,889
1999	43,644	4,759

Source : Department of Agriculture & Food

Irish lamb prices declined in 1999 with prices to November down 10 per cent on 1998 levels. Prices up to the end of March 1999 were similar to those of 1998 but declined for the main mid - season lamb period. Lamb prices declined rapidly in August 1998 following the collapse of the Russian market for lambskins. The trade for skins has remained depressed with a knock-on effect on lamb prices. Hill sheep farmers producing light lambs for the Mediterranean markets had a difficult year in 1998, but there may be some recovery on the Spanish market in the last quarter of 1999. The overall outlook for 2000 is that lamb prices will remain at similar levels as in 1999.

The annual sheep premium is shown in Table 3.2 for 1998 with a forecast for 1999. The premium is paid in three payments and the total for 1999 is likely to be almost identical to 1998 despite a 10 per cent decline in lamb prices. This illustrates the inability of the current ewe premium scheme to compensate Irish producers for falling lamb prices.

Table 3.2: Ewe and rural world premia, 1998 & 1999 (IR/ewe)

	1998	1999
Ewe premium	17.72	17.76
Rural world premium	5.23	5.21

Source: Department of Agriculture and Food

*Estimate

Due to falling producer prices in Ireland, an Aid to Private Storage Scheme was introduced in September 1999. The scheme allowed for the purchase of up to a maximum of 250 tonnes of sheepmeat.

Gross margins for early lamb, mid-season lamb and Scottish Blackface production systems are shown in Table 3.3. Actual margins are presented for 1998 with estimates for 1999 and forecasts for 2000. The 1998 margins are based on data from sheep flocks being farmed on soils with a wide use range.

Table 3.3: Gross margin (IR£) per ewe, 1998-2000

	1998	1999 ¹	2000 ²
Early lamb	59	60	58
Mid-season lamb	49	44	47
Hill – Blackface	35	32	32

Source: Teagasc National Farm Survey

¹Estimate

²Forecast

There was a small increase in the 1999 margin for early lamb. Lamb prices were 7 per cent higher in March and April 1999 and there was a higher level of disposals in those months, as farmers are now very conscious of the rapid decline which can take place in the post Easter period. However, inclement weather conditions resulted in higher levels of concentrate feeding which partially negated the increased output. There is a much greater difference between margins per hectare for mid-season and the early lamb systems and margin per ewe due to more intensive stocking rates and higher levels of labour and management inputs for the early lamb system.

Mid-season lamb is the predominant system of sheep production in Ireland and it is the viability of this system which determines how the sheep enterprise fares nationally. The trend in the gross margin for this system is shown in Table 3.4.

Table 3.4: Gross margin (IR£) per ewe, mid season lamb 1994 – 2000

1994	1996	1997	1998	1999 ¹	2000 ²
53	58	56	49	44	47

Source: Teagasc National Farm Survey

¹Estimate

²Forecast

The decline in the margin from 1998 to 1999 is due to a combination of lower lamb prices and higher feed costs. The data show that sheep margin are actually in decline in nominal terms with no allowance being made for inflation. Direct payments contributed IR£18.50

per ewe to the gross margin for 1998 i.e.38 per cent. Hill sheep are more dependent on direct payments with 102 per cent of the gross margin coming in the form of subsidies i.e. hill sheep producers received £35.6 per ewe in subsidies in 1998 but only had a margin of £35 as sales of lambs were not sufficient to cover direct costs. The trend in output, costs and gross margin per hectare for mid - season lamb is shown in Table 3.5.

Table 3.5: Trend in output, costs and gross margin (IR£/ha), mid-season lamb, 1998 - 2000

	1998	1999 ¹	2000 ²
Gross output	652	621	653
Direct costs	194	407	204
Gross margin	458	414	449

Source: National Farm Survey

¹Estimate

²Forecast

The per hectare data again shows declining margins for sheep production. Since the 1992 McSharry Reform of the CAP sheep margins have lost competitiveness with other farm enterprises. The common EU ewe premium introduced following the 1992 Reform has failed to compensate Irish sheep producers for the decline in lamb prices. This has never been more evident than in 1999 when Irish lamb prices have declined by 10 per cent, but the ewe premium has remained static at £17.76 per ewe due mainly to high lamb prices on the continent. Lamb prices in EU countries have not converged, as was envisaged and again this was evident in 1999 when the Irish price for lamb in mid - August was IR£1.82 per kg carcass compared to IR£2.93 per kg which French producers received for their lamb. Results from the Teagasc National Farm Survey show that output or total revenue received per ewe has remained capped at approximately £80 since 1990, as increased lamb prices have resulted in reduced ewe premium payments.

The Agenda 2000 Reform of the CAP makes no references to policy changes for the sheep sector. However the proposal to reduce beef prices by up to 20 per cent will also have a negative effect on sheepmeat prices. Although additional compensatory payments are being introduced for beef there are no such proposals for the sheep sector. The ewe premium, due to changes introduced in 1992, will not compensate Irish sheep producers for declining prices. In addition the increase in extensification rates on beef cattle will also make returns to sheep production less competitive. EU policy has a major impact on the sheep enterprise and if changes are not made to sheep policy measures, then the decline which began in 1992 will continue.

Review and Outlook for Pigs

Paul Kelly

Teagasc Rural Economy Research Centre

The difficult times experienced by pig producers in 1998 continued in 1999. Prices of all types of pig - weaners, finished pigs and cull sows were lower in 1998 than in any year since 1986 when the Teagasc National Monitoring of Prices and Margins in Pig Production commenced. Final annualised prices for 1999 will be below even the 1986 level.

Like all price changes in a market, the fall in pig prices is due to the interaction of supply and demand. Demand for pigmeat within the EU is relatively constant (there has not been a pigmeat equivalent of BSE). Production of pigmeat in the EU increased as a result of producer expectations based on the high prices and margins of 1995 and 1996. In such circumstances the only reasons for maintaining prices are an increase in demand, a reduction in supply or a combination of both. In order to temporarily reduce supplies coming on to the EU market, aid for private storage (APS) was introduced in September 1998. Much of the stocks held under this scheme were exported to Russia with the aid of export refunds. The level of export refunds to Russia were reduced in September 1999 which has had the effect of reducing sales to Russia. The APS scheme was ended at the same time leading to an increase in supplies onto the EU market. The combined effect of these two events led to a sharp decline in prices in the Autumn of 1999.

It is too early to tell the precise response of producers to these negative market signals but changes in Irish pig numbers over the period 1997 to 1999 are shown in Table 4.1.

Table 4.1: Trends in pig numbers in Ireland June 1997 to June 1999 ('000)

	June 1997	June 1998	% change 98/97	June 1999	% change 99/98
Pigs for breeding					
<i>Gilts in pig</i>	27.2	25.5	-6.2	25.5	+0.3
<i>Sows in pig</i>	104.4	111.1	+6.4	109.5	-1.4
<i>Other sows for breeding</i>	37.4	38.6	+3.2	36.5	-5.3
<i>Gilts not yet served</i>	17.7	19.8	+11.9	16.8	-15.3
Boars	5.0	4.9	-2.0	4.3	-13.6
Total breeding pigs	191.7	199.9	+4.3	192.6	-3.7
Other pigs (classified by livewt.)					
<i>80kg and over</i>	140.4	169.2	+20.5	141.7	-16.2
<i>50 kg and under 80kg</i>	391.0	429.7	+9.9	409.0	-4.8
<i>20kg and under 50kg</i>	530.0	550.6	+3.9	550.8	0.0
<i>Less than 20kg</i>	446.5	469.2	+5.1	492.8	+5.0
<i>Total other pigs</i>	1,507.8	1,618.7	+7.3	1,594.2	-1.5
Total all pigs	1,699.5	1,818.6	+7.0	1,786.9	-1.7

Source: Central Statistics Office, Pig Survey

The early signs of a decrease in the total number of pigs that were apparent in 1998 had worked through to a decline in total pig numbers by 1999. In June 1999 the total number of pigs in Ireland was 1.79 million, a decrease of 1.7 per cent from 1998. There was also a

decrease of 3.6 per cent in the number of breeding pigs, which is another indication of a further future decline in total pig numbers. Pig producers have been responding to signals from the market place. If this is repeated in other EU member states the downward trend in pig prices will eventually be halted.

Pig slaughterings

The ease and scale of cross border trade in the pig industry means that pig slaughtering statistics must be considered on a whole island basis if sense is to be made of the numbers. The number of pigs slaughtered on the whole island in 1997 and 1998 was 4.2 million and 4.5 million respectively. On a “year to date” basis up to the week beginning October 23, the kill for 1999 is likely to be about 4.6 million.

These data indicate a slow down in the annual increase of pig slaughterings, from 6.3 per cent in 1998 to 3.3 per cent in 1999. This is another indication that slaughterings are beginning to peak and supplies will reduce in 2000. This should help prices to recover.

Margins

In the pig enterprise, the margin over feed costs is used instead of the traditional farm gross margin.

In forecasting margins over feed costs in pig production, projections of costs were made by applying appropriate indices from the CSO to individual cost items. The largest item is feed cost and it is expected that it will decline slightly from its 1999 level in 2000, due to the reduction in grain price caused by the reduced intervention price following the Berlin Agreement.

Price data were obtained from information recorded by Teagasc pig advisors. The trend in margin over feed costs is shown in table 4.2.

Table 4.2: Margin over feed costs in integrated pig production (p/kg dcw)

1998	1999¹	2000²
27.1	16.1	30.2

¹Estimate

²Forecast

The forecast for the year 2000 is made on the basis of an improvement in pig prices to about 90 pence per kg dcw and the slight reduction in costs based on the grain price reduction. The management of the pigmeat market by the Aid for Private Storage and Export Refund mechanisms makes future forecasts very hazardous. The operation of these instruments could easily change the forecasts for the year 2000.

Review and Outlook for Tillage Crops

Paul Kelly
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The total area of wheat, oats and barley harvested in 1999 was about 281,000 ha, a decline of four per cent from the 1998 level.

The total national base area claim was 328,000 ha, a decline of 2.5 per cent from 1998. The area of arable crops declared as forage fell by 43 per cent from 5,500ha to 3,100 ha. The area claimed for oilseeds and proteins declined by just over a half to about 5,000 ha. On the other hand the area of silage maize increased from 5,000 ha to 7,800 ha, reflecting the increased interest in this crop for livestock feed. The area of linseed also increased from 5,000 ha to nearly 8,000 ha, which can be viewed as “aid harvesting”.

The area of set-aside increased by almost fifty per cent which was largely in line with the increase from five to ten per cent for compulsory set-aside.

On a crop by crop basis, there was an overall decline in winter cereals due to the poor sowing conditions in Autumn 1998. The decline was about one third, and varied from 32 per cent for winter barley, and more significantly, about 35 per cent for winter wheat and also winter oats. There was a corresponding increase in the planting of spring cereals but overall the wheat area (of 70,000ha) was down by about 17 per cent on its 1998 level. The area of barley in 1999 was almost unchanged from 1998 and the area of oats increased slightly to 20,000 ha.

The cereals planted in Autumn 1999 and Spring 2000 will be the first harvested under the new cereals regime agreed at the Berlin European Council in March 1999. This means that for the 2000 harvest the intervention price will be reduced by seven and a half per cent and the area aid will be increased in partial compensation for this.

Yields and quality

Cereal yields in 1999 were higher for all types than in 1998. The greatest increase in yield was for spring barley which yielded about 20 per cent more than in 1998. Spring wheat yields on the other hand hardly increased at all, since they were already high in 1998.

Table 5:1 Estimated cereal yields for 1999 (tonnes/ha)

Winter wheat	9.4	Spring barley	6.5
Spring wheat	7.8	Winter oats	7.8
Winter barley	7.6	Spring oats	6.1

Source: Teagasc Harvest Report No. 2, 1999

Cereal production

Combining yield and area data gives an estimate of cereal production. The area data used is the estimated area harvested rather than the area claimed for area aid payments. The change in cereal production between 1998 and 1999 is shown in Table 5.2.

Table 5.2: Estimated cereal production in 1998 and 1999 ('000 tonnes¹)

	1998	1999	Change %
Wheat	673	597	-11
Barley	1073	1278	+19
Oats	119	136	+14
Total	1,865	2,011	+8

Source: Teagasc Harvest Report No. 2, 1999

Note:¹ weight is 'green' weight, not adjusted for moisture content.

Prices

Cereal prices in 1999 were above their 1998 levels. Feed barley in Autumn 1999 fetched between £78 and £80 per tonne and feed wheat was £82 to £83 per tonne. Oats varied between £78 and £83 per tonne depending on whether they were for human or animal consumption. These prices are based on quotations for grain at 20 per cent moisture.

During the course of 1999 feed wheat had been sold at up to £5 per tonne less than barley due to the lack of intervention for wheat. The more usual differential of £2 to £5 per tonne in favour of wheat re-appeared later in 1999. For the 2000 harvest the intervention price for barley will be 7.5 per cent below its 1999 level and this will probably be fully reflected in the barley price. The price of feed wheat will be affected as a consequence of this and also by the price at which it may be imported. Since much wheat is imported from the UK, the strength of sterling relative to the Irish pound (or the Euro), has an effect on the price of wheat from the UK. A strong sterling raises the Irish price as happened in 1999. A limit is placed on this by the availability of imports from other competitors, particularly France.

Area aid payments

Area aid payments in 1999 were the same as in 1998 as the decline due to the revaluation of the Irish pound prior to entry to the EMU on 1 January 1999 was fully compensated. Full compensation will not be paid in future years. Two thirds of the 1999 amount will be paid in 2000, one third in 2001 and none thereafter (assuming that the nationally funded part of the compensation is paid).

In any event, as a result of the Berlin agreement the area aid for cereals will be increased and set-aside payments will be reduced from their 1999 levels in 2001 and 2002. The cereals area aid and set-aside payments for Irish farmers for the calendar years 1999 and 2000 are shown in table 5.3.

Table 5.3: Cereals area aid and set-aside payments in 1999 and 2000 (£/ha).

	1999			2000		
	Area aid	Monetary compensation	Total	Area aid	Monetary compensation ¹	Total
Cereals	260.19	13.86	274.15	280.92	9.24	290.16
Set-aside	329.58	17.52	347.10	280.92	9.24	290.16
Maize silage	248.22	13.22	261.44	268.00	8.73	276.73

Note: ¹ The monetary compensation is an estimate only as final payment details have still to be decided.

Gross margins

The basis for this analysis is the ‘mid-range’ of tillage enterprises on soil class 1 as carried out for the enterprise analysis of the National Farm Survey. This is updated using appropriate indices for agricultural prices published by the Central Statistics Office. In making the estimates and forecasts of costs it is implicitly assumed that the mix of inputs does not change.

Table 5.4: Expected trend in gross margins 1998-2000 (£ per ha)

Crop	1998	1999 ¹	2000 ²
Winter wheat	526	668	659
Winter barley	444	524	535
Winter oats	460	574	565
Spring wheat	496	572	562
Malting barley	409	535	523
Spring feeding barley	395	461	452
Spring oats	351	499	529
Sugar beet	1032	1307	1006
Potatoes	2062	2073	2,500

Source: Teagasc National Farm Survey

¹Estimate

²Forecast

Estimated gross margins for the main cereal crops, spring barley and winter wheat showed notable increases between 1998 and 1999. The forecasts based on ‘normal’ weather and the trend of yields over a long period of years indicate that gross margins will decline in 2000 from their 1999 levels. The decline in prices will hit the gross margins of high cost crops more than low cost ones unless the yield increases are sufficient to compensate. The greater pressure in future years is therefore likely to be on growers of winter wheat rather than spring barley.

For sugar beet, good weather conditions meant that yields per ha were higher in 1999 than in 1998, (52tonnes/ha and 45tonnes/ha respectively). The combination of yield and sugar content meant that the overall price per tonne of output from the sugar beet enterprise was £39. In the year 2000, if yields decline to more usual levels the gross margin will decline to about £1000 per ha but as always, much will depend on the weather.

For potatoes, the forecast increase in gross margin estimated 1997 to 1998 occurred as expected but the 1999 margin is still difficult to estimate. This is due to a steep decline in the price of main crop potatoes from as high as £250 per tonne in March 1999 to as low as £80 per tonne in November. The forecast for 2000 assumes a yield of 25 tonnes per ha.

Farmers' Plans for 2000

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Teagasc carries out an annual survey every autumn to obtain farmers planning intentions for the coming year. The survey is conducted on farms participating in the National Farm Survey by means of a single visit questionnaire. Participants are asked what their intentions are for the coming year in relation to plans for their breeding stock numbers, crop acreages, investments and borrowings. The following results are based on 1,028 responses obtained over the last 3 months.

Livestock Changes

There is a small decline of 2.5 per cent planned in dairy cow numbers for 2000 (Table 6.1), but suckler cows are planned to decline by almost 8.4 per cent. Overall this results in a 5.5 per cent decrease in total cow numbers.

Table 6.1: Breeding livestock changes planned for 2000

	% Change 1999/00		
	National	East	West
All cows	-5.5	-6.5	-5.8
Dairy cows	-2.5	-4.3	-2.8
Suckler cows	-9.2	-11.0	-7.6
Ewes let to ram	-8.4	-5.2	-11.1
Ewes for premia	-3.8	-	-

West = Donegal, Monaghan, Cavan, Mayo, Sligo, Roscommon, Leitrim, Galway, Longford, Clare, Kerry & West Cork.

East = Other.

The decrease planned for the suckler cow herd can be partially explained by the proposal in the CAP Reform to allow 20 per cent of the suckler quota to be filled by dry heifers from 2000 onwards. The latest data on suckler cow numbers from the CSO show that they were 77,700 cows in excess of our national suckler quota of 1.1M. Changeover to a census system of calculating livestock numbers in 2000 to collect extensification premia will mean that excess suckler cows will be included. There is an incentive therefore to reduce cows which are not eligible for premia and this will encourage farmers to cull inferior cows. On a regional basis farmers in the East plan on reducing dairy cows and suckler cows by 4.3 and 11 per cent respectively compared to 2.8 and 7.6 per cent in the West.

There is a sizeable reduction planned for ewes let to the ram in the autumn of 1999 with farmers intending to reduce breeding numbers by 8.4 per cent. This is by far the largest reduction planned by farmers in the last decade and can be explained by declining profit margins in the lowland and hill areas and drystock farmers concerns over changes in the conditions to qualify for extensification in 2000. In recent years farmers have kept dry ewes to draw subsidies only i.e. ewes qualifying for quota but not let to the ram. In the autumn of 1999 lowland sheep farmers stated that they intended to increase the number of

dry ewes kept in 2000 by 27 per cent compared to the number in 1999. This increase in the number of dry ewes combined with a small increase in ewe lambs let to the ram will result in a decline of only 3.8 per cent in ewes qualifying for premia. The decision to withhold ewes from breeding in the lowland flock further reflects farmers dissatisfaction with returns from the market place for lamb in 1999 and could lead to a reduction of up to 10 per cent in lambs for slaughtering in 2000.

Farmers plans in relation to tillage crops in 2000 are shown in Table 6.2. Specialist tillage farms comprise only 5 per cent of the total farm population but they account for over 75 per cent of winter wheat, spring wheat and winter barley acreage.

Table 6.2: Crop changes planned for 2000

	% Change 1999/00
Total cereals	+3.9
Winter wheat	+69.0
Spring wheat	-39.6
Oats	-10.8
Winter barley	-7.5
Spring barley	0
Set-aside	-5.4
Potatoes	+19.2
Total tillage crops	-0.5

Overall a 0.5 per cent reduction is planned for in 2000 in the total acreage of tillage crops. The acreage devoted to cereals is planned to increase by 3.9 per cent. The large increase planned for winter wheat and reduction in spring wheat is due to the low acreage of winter wheat planted in the autumn of 1998 due to inclement weather. There is a large increase (19.2 per cent) planned for the potato crop in 2000, but potato prices were high when this forecast was made. Potato prices have declined considerably since the autumn and this will result in a much smaller increase in planting in 2000.

Investment Plans

Approximately 23 per cent or 29,500 farmers indicated that they planned to make additional investments in 2000. This is a 5 per cent increase on the 18 per cent who indicated increased investment in 1999. As in previous years, dairy farmers comprised almost 46 per cent of those intending to invest, with cattle farmers accounting for a further 36 per cent.

Table 6.3: Farm Investment planned for 2000 (£M) by investment type

	2000		1999		Change	
	£M	%	£M	%	£M	%
Machinery	47	17	43	23	+4	+9
Buildings	139	49	100	54	+39	+39
Land	44	16	19	10	+25	+132
Milk quota	26	9	9	5	+17	+188
Other	26	9	15	8	+11	+73
Total	282		186		+96	+52

Total investment planned for 2000 comes to £282M (Table 6.3) an increase of 52 per cent from the £186M planned for 1999 and similar to that planned for 1998.

Investment in agriculture had been on the decline since 1996 and reached its lowest level in 1998 when planned investment was only £186M. The major increases in planned investment is for land, milk quota and farm buildings. However farmers plan on increasing investment in all areas listed in Table 6.3. In previous years estimates of farmers intentions on buildings investment has been close to the actual out-turn, whilst planned investment in machinery has turned out to be understated. The same occurred in 1999 when the actual investment in buildings was £124M compared to that planned of £100M, whilst actual investment in machinery was £124M compared to a planned investment of only £43M. If this pattern is repeated in 2000 then the actual investment in farm machinery will probably be closed to £120M. The increased investment in farm buildings in 1999 can be explained by the re-introduction of grant aid for farm buildings to control farmyard pollution in late 1998.

Table 6.4: Farm investment planned by system of farming for 2000 (£M)

	2000		1999		Change
	£M	%	£M	%	%
Dairying	165	58	121	65	+36
Cattle	75	27	44	24	+70
Sheep	22	8	10	5	+220
Tillage	20	7	11	6	+180
Other	-	-	-	-	-
Total	282		186		+52

It can be seen from Table 6.4 that the increase in investment for 2000 is spread across all the major farming systems. The largest increases in investment are planned for the drystock sector and this can be linked to their participation in REPS, as the major investment planned is farm buildings. One third of farmers interviewed were in REPS, representing approximately 42,000 farms. Of the two thirds not in REPS, 10 per cent stated that they plan on joining, 69 per cent do not plan on joining, whilst the remainder were uncertain.

Thirty per cent of farmers interviewed had an off-farm job and these were mainly drystock farmers. Farmers were also asked for their future plans in relation to off-farm employment and results are shown in Table 6.5

Table 6.5: Intentions on farming over next 3 years (%)

Farming full time	45
Off-farm employment	35
Retire	7
Don't know	13

Of the 7 per cent who plan on retiring approximately 54 per cent will be early retirement.

Appendix Table 1: Output, Input and Income in Agriculture, 1999 *Advanced estimate*

Description	Estimated Value			Change 1999/1998	
	1997	1998	1999	Value	Volume
	£M			Percent	
Livestock (incl. stock changes)	1,760.6	1,686.9	1,586.7	-5.9%	-0.4%
<i>of which:</i> <i>cattle</i>	1,093.0	1,086.7	997.2	-8.2%	-1.7%
<i>pigs</i>	254.3	212.0	190.0	-10.4%	4.5%
<i>sheep and lambs</i>	196.2	162.6	152.9	-6.0%	4.7%
Livestock Products	1,145.3	1,157.0	1,107.2	-4.3%	-0.6%
<i>of which:</i> <i>milk</i>	1,116.3	1,134.1	1,085.1	-4.3%	-0.9%
Crops (incl. stock changes ¹)	409.5	426.5	426.9	0.1%	-2.2%
<i>of which:</i> <i>cereals</i>	125.9	112.5	108.0	-4.0%	-7.4%
<i>root crops</i>	95.9	119.8	116.9	-2.4%	3.3%
Gross agricultural output	3,315.4	3,270.4	3,120.8	-4.6%	-0.7%
Total inputs of materials and services	1,643.3	1,764.9	1,732.9	-1.8%	-1.5%
<i>of which:</i> <i>feeding stuffs</i>	589.9	651.1	643.5	-1.2%	2.0%
<i>fertilisers</i>	258.4	260.6	236.7	-9.2%	-10.3%
Gross agricultural product at market price	1,672.1	1,505.6	1,387.9	-7.8%	0.0%
Subsidies ² less agricultural levies	916.8	1,011.7	897.7	-11.3%	
Gross agricultural product at factor cost	2,588.9	2,517.3	2,285.6	-9.2%	
Depreciation	433.3	454.7	470.1	3.4%	
Net agricultural product at factor cost³	2,155.6	2,062.5	1,815.5	-12.0%	
Wages, salaries and land annuities	193.7	196.3	198.1	0.9%	
Income from self-employment and other trading income⁴	1,961.8	1,866.3	1,617.4	-13.3%	

Source: Central Statistics Office

¹Principally cereals and potatoes

²Based on data received from the Department of Agriculture & Food

³Income arising in agriculture

⁴This is calculated before deduction of interest payments on borrowed capital. The estimates of overall interest payable by Agriculture are:- 1997, £183 million; 1998, £191 million; 1999, £181 million.

Background Notes to Appendix Table 1.

Gross Agricultural Product	Gross agricultural products at market prices is obtained when total inputs of materials and services are deducted from gross agricultural output. Gross agricultural products at factor cost is derived when subsidies are added to and agricultural levies deducted from gross agricultural product at market prices
Income arising in agriculture	Net agricultural products at factor costs or income arising in agriculture is obtained when the estimated depreciation of agricultural machinery and equipment and farm buildings is deducted from gross agricultural product at factor cost.
Income from self-employment and other trading income	Income from self-employment and other trading income is derived when the rent element in land annuities as well as wages and salaries paid to employees are deducted from income arising in agriculture. This is the amount available to remunerate farmers, their families and other agricultural producers for their labour and management and to cover interest on borrowed capital.
Interest on borrowed capital	As not all interest payable on borrowings for non-agricultural purposed could be removed, these estimates should be viewed as establishing an upper bounds for the interest payable on productive borrowings. The figures have not been adjusted to allow for any interest received by agricultural producers on monies held in interest-bearing accounts.
References	Comparable Output, Input and Income results from the EU members states for 1998 are contained in the European Statistical Office (Eurostat) publication <i>Income from Agricultural Activity 1998</i> (1999 Edition). Advance estimates for 1999 should be available shortly.

Appendix Table 2: Net Income form agricultural activity of total labour input (M euros)

Country	1996	1997	1998	% change 1998/1997
European Union	98,392	95,792	91,985	-4.0%
Austria	1,615	1,415	1,324	-6.4%
Belgium	1465	1,468	1,285	-12.5%
Denmark	1,888	1,706	1,183	-30.6%
Finland	1,794	1,643	1,524	-7.2%
France	22,360	21,600	21,334	-1.2%
Germany	9,228	8,997	8,655	-3.7%
Greece	6,945	6,922	6,933	0.1%
Ireland ¹	2,434	2,503	2,368	-5.4%
Italy	19,203	19,230	19,614	2.0%
Luxembourg	86	79	82	3.7%
Netherlands	4,692	5,554	5,007	-9.8%
Portugal	2,510	2,133	1,881	-11.8%
Spain	16,264	15,665	15,210	-2.9%
Sweden	339	432	465	7.6%
United Kingdom	7,569	6,589	5,322	-19.2%

Source: New Cronos database, Eurostat

¹Converted at the European Union official exchange rate conversion factor fixed at £0.787564 = 1euro , effective from 1 January 1999.