Economic Analysis of Policy Changes in the Dairy Sector

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Summary

This study examines the effect of changes in agricultural policy and other important economic factors on the outlook for milk production in Ireland in future years. The analysis is conducted at an aggregate milk and dairy commodity level. A companion report provides similar detail on related farm level work. Following an initial period of development, the analysis summarised here took place over a period of three years.

Objectives
The potential effect of the European Commission's proposed changes to the Common Agricultural Policy (CAP) under Agenda 2000 are examined, as is the eventual Agenda 2000 Agreement produced in Berlin in March of 1999. The implications for the dairy sector of differing future euro/dollar exchange rate paths are also analysed.

Methodology
A series of interlinked economic models capable of projecting key price and output variables were built for the main Irish agricultural commodities, including the dairy sector, and these in turn were linked with models for the EU and the World. It was thus possible to estimate the implications for the Irish dairy sector of supply, demand and policy changes at a world and EU level.

Key Findings
It was found that the reform of the CAP in the dairy sector would lead to a reduction in the Irish milk price of 11 per cent relative to the outcome if the reforms were not introduced. However, increases in quota and the availability of compensation following from the Berlin Agreement should offset much of this decline. The effect of the future exchange rate between the euro and the US dollar was of significant importance. Other things being equal, a weaker euro made EU dairy exports more competitive outside of the EU, resulted in less pressure on the CAP budget and ultimately would produce more favourable milk prices than would be the case under a stronger euro. The analysis shows that a difference of 20 per cent in the euro/dollar exchange rate would result in a 7 per cent difference in milk price.

Introduction

This report covers analysis conducted by the FAPRI-Ireland Partnership, a research consortium based in the Rural Economy Research Centre, Teagasc. Set up in 1997, the purpose of the Partnership is to conduct analysis of the implications of policy changes for Irish agriculture over a ten-year time horizon. This report reflects the work done concerning the dairy sector. There are companion reports which cover the other main commodities, agricultural inputs and agricultural income.

The report examines the potential implications for the Irish dairy sector of

- The proposed Agenda 2000 reforms to the Common Agricultural Policy (CAP) brought forward by the European Commission in March 1998 (Analysis published in December 1998)

- The actual reforms to the CAP agreed in March 1999, as contained in the Agenda 2000 Berlin Agreement (Analysis published in May 1999)

- alternative future euro/dollar exchange rates (Analysis published in March 2000)

The report is divided into 3 parts, reflecting the results of these three separate analyses.

In this project, policy analysis is conducted by producing a baseline - essentially a projection of the future based on policies currently in existence or agreed to come into existence. This baseline outcome is then contrasted with the projected outcome of a change in policy. In this way, it is possible to gauge the potential effect of the change in policy.

Over the last 15 years, colleagues at FAPRI (Food and Agriculture Policy Research Institute) in the US have developed an extensive set of agriculture models for specific commodities. As part of its Annual Outlook on World Agriculture, FAPRI uses these models to provide projections for the Baseline scenario at a global level and for component regions, including the EU, for each year over the next decade. The results for Ireland obtained in this project were produced incorporating results from FAPRI's world models.

Given that over 70 per cent of dairy output is exported from Ireland, conditions in EU and world markets will exert a considerable influence on the outlook for Irish dairy products. In turn at the EU level, the status of the dairy sector is conditioned by the CAP and other events at a world level. The European and world dimension provided by the link between the work in this project and the work taking place at FAPRI in the US is therefore imperative.

A Note on Interpretation

Forecasting and policy analysis for commodity markets is a bit like taking aim at a moving target. The environment in which this analysis is conducted is constantly evolving. Changing macroeconomic and market supply and demand conditions can influence the effect of policy and the results of the analysis. Over time, the outlook for a commodity may change as new information is incorporated into the analysis. Projections for the outcome in future years may therefore differ in successive analyses. Accordingly, the interested reader should aim to familiarise him or herself with the most recent projections available from the Partnership.

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The Baseline

The evaluation of the effect of a change in policy or other critical factors is made, by comparing the future outlook for the Irish dairy sector under the 'Baseline Scenario' with the outlook under the alternative scenario. The Baseline Scenario is a projection of the future status of the dairy sector under the assumption that there is no change in known current policy. In other words, it includes agreed, impending, changes to existing policy. Finally, the assumptions of the baseline change in successive years of the analysis, as policy changes and these changes are incorporated into the baseline. For example in Section 3 of the report the baseline incorporates policy changes which are omitted in Section 1 and Section 2 as Agenda 2000 had not been agreed at the time these analyses were conducted.

1 Agenda 2000 March 1998 Commission Proposals

This section of the report focuses on analysis published in December 1998 to determine the potential impact on the Irish dairy sector of the proposed reforms to Agenda 2000 issued by the European Commission in March 1998. The reforms which were later agreed, are examined in Section 2.

The evaluation of the effect of the Agenda 2000 proposals is made by comparing the future outlook for the Irish dairy sector under the 'Baseline Scenario' with the outlook which incorporates the Agenda 2000 policy proposals. Here the Baseline specifically excludes policy changes proposed in Agenda 2000. However the Baseline incorporates other agreed changes in existing policy.

The Agenda 2000 dairy proposals (March 1998) in brief:

- A reduction of 15% in the intervention support prices for butter and SMP. This price decrease will take place through four equal price reductions over the period July 2000 to June 2003. Intervention prices remain at 2003 levels to 2007. As well as achieving a reduction in intervention prices this proposal would have the effect of predetermining intervention prices for at least 6 years thus replacing the current annual approach to intervention price setting.

- Support for subsidised internal disposal of dairy products within the EU would continue.

- Compensation would be paid to dairy farmers for the loss of income resulting from the effects which the 15% dairy product support price reductions would have on farm milk prices. In addition, compensation would be provided for the loss in revenue from the fall in cull cow and calf values due to the proposed 30% reduction in EU beef market support prices. In all, this will involve the introduction of a scheme of direct payments to dairy farmers subdivided into 3 parts.

- To extend the milk quota regime to 2006 and increase the total EU reference quantity by 2% over 4 years from 2000 to 2004.

- To introduce horizontal measures which would establish common rules for all direct payments schemes under the CAP.

The Baseline projection provides a benchmark against which the implications of policy changes can be measured.

The key assumptions used in analysing the Agenda 2000 proposals are detailed in the box below and are based directly on the version of the proposals for CAP reform published in March 1998.

Under the proposed criteria for the allocation of additional quota, the overall increase of 2% in the EU quota, would not be distributed proportionally across member states in the EU. Ireland would receive only a 1% increase in national quota within this proposal.

On the basis of the assumptions of the baseline and of the Agenda 2000 proposals, the future outlook for the Irish dairy sector was projected. Projections of future values were provided by the model for a variety of dairy indicators including farm milk price, milk output per cow, dairy cow numbers, dairy product production and dairy product consumption.

1.1 The Irish Dairy Sector Baseline Scenario and Agenda 2000 proposals

The analysis in this project produces projections for agriculture at an EU level and this outlook at an EU level is crucial for the outlook for Ireland. For this analysis the period concerned was 1998 to 2005. In the interest of brevity the EU outlook is not discussed in this report and commentary is confined to the situation in Ireland. Much greater detail is provided in the FAPRI-Ireland Outlook report. (Donnellan *et al* , 1998)

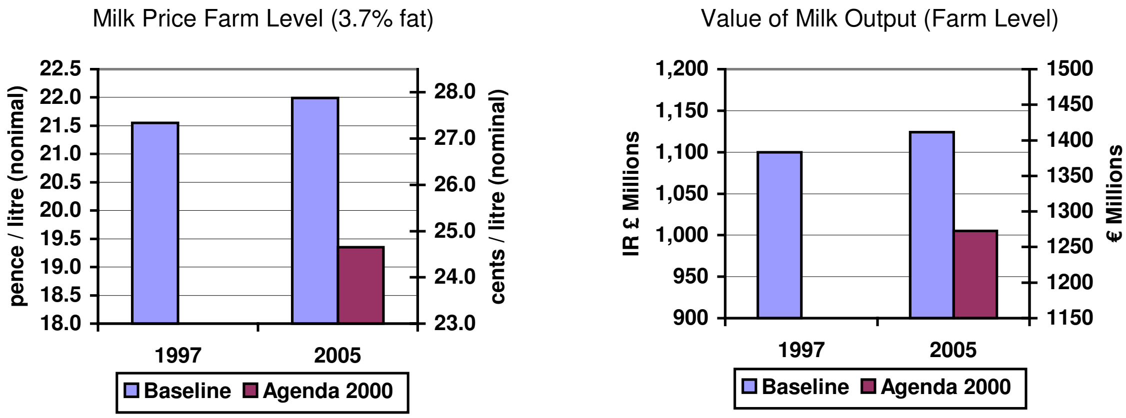
Irish Creamery Milk Price

Under the ***Baseline*** projection, Irish creamery milk prices were projected to be relatively stable over the course of the projection period. The 2005 outcome shows a milk price of € 0.28 per litre (£1.00 a gallon), up slightly on the 1997 figure. Under the Agenda 2000 proposals, milk prices are projected to fall gradually to just under € 0.25 per litre (89p a gallon). This represents a 9% reduction on 1997 prices and an almost 12% reduction on the figure in the 2005 Baseline scenario. Figure 1-1 shows the projected effects of the Commission's proposals on the Irish farm milk price and the value of milk output.

Value of Irish Milk Output

Under these proposals the total value of milk output is set to fall by just under 11% compared with the Baseline by the year 2005 as illustrated in Figure 1-1. This policy change outcome represents a reduction of almost 8% on the 1997 value of milk output. This compares with a projected Baseline increase in milk value by 2005 of about 3% on the 1997 value. The projected reduction in the value of milk output under Agenda 2000 is not as large as the milk price reduction due to the increase in the volume of output arising from the 1% increase in quota.

Figure 1-1: Manufacturing Milk Price and value of Milk Output: Ireland 1997, 2005



Source: CSO and Ireland Dairy Model

Irish Dairy Product Mix and Trade

Little change in the relative prices of butter and cheese is anticipated over the Baseline projection period. Butter production is set to decline by over 2% with cheese production projected to increase by 1% by the end of the projection period. The situation under the proposed Agenda 2000 proposals for reform would be little different, with a further marginal shift into cheese at the expense of butter production. Little change in product trade is projected in the Baseline and this is also the case under the Agenda 2000 proposals. The most significant changes over the Baseline are an increase in casein exports in line with increased production and an increase in cheese imports.

Agenda 2000 Beef proposals: Implications for the Irish Dairy Sector

The projected implications of the Agenda 2000 proposals for other sectors of Irish agriculture can be found in related reports.[2] However, given that beef is also a source of income for dairy producers, it is useful to summarise the projected impact of the Agenda 2000 proposals for the beef sector.

Under these Agenda 2000 proposals dairy producers would be compensated for the loss that would be incurred due to reductions in beef market support prices through the dairy-beef component of the subsidy package. Although a 30% cut in beef market support prices was proposed, FAPRI models indicate that the beef market would balance at a level above this, and that prices would fall by only 20%.

Under the Agenda 2000 proposals evaluated by the FAPRI-Ireland Beef Model, Irish finished male cattle prices fall by around 24% relative to their baseline value in 2005. However, due to the projected depopulation of the beef cow herd, cull cow prices would fall by closer to 26%. This would represent a 35% reduction on 1997 prices by 2005.

In the past some of the special beef premia has become capitalised into the value of calves. Under these Agenda 2000 proposals it is projected that the proposed increase in the special beef premia would to an extent mitigate the fall in calf prices stemming from the adult cattle price reductions. In addition, the projected fall in the number of beef cows will also help support calf prices. Calf prices are therefore anticipated to fall by only 5% relative to their baseline value by 2005. This would represent a 14% reduction on 1997 prices.

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[2] For a more detailed exploration see Economic Analysis of Policy Change in the Beef and Cereal Sectors Armis :4432 and Armis: 4400

Conclusions

Based on the analysis presented here the implications of the introduction of the Commission's Agenda 2000 proposals for the Irish dairy sector at an aggregate level are less than suggested by the 15% reduction in intervention support. At an Irish level, the effects of Agenda 2000 on milk yields, dairy cow numbers, dairy product mix, product trade and consumption will be little different to those envisaged under the Baseline scenario. The only substantial change is an almost 12% reduction in farm milk prices by 2005 relative to the Baseline price in that year. Despite a one per cent increase in quota, the reduction in the 2005 value of milk output relative to that in the Baseline, would be broadly similar to the milk price reduction, as the quota volume increase would be absorbed by higher butterfat content in milk delivered

2 Analysis of the Berlin Agreement

This section of the report focuses on analysis published in May 1999 to determine the potential impact on the Irish dairy sector of the final Agenda 2000 Berlin Agreement which was reached in March 1999.

The evaluation of the effect of the Agenda 2000 Agreement is made, by comparing the future outlook for the Irish dairy sector under the 'Baseline Scenario' with the outlook under the Agenda 2000 Berlin Agreement. As stated previously, this Baseline excludes the introduction of Agenda 2000, but incorporates other agreed changes in policy in existence at that time.

Agenda 2000 Berlin Agreement Terms in brief:

For the dairy sector the Berlin Agreement differs from the original CAP reform proposals. From an Irish perspective the key concession in the Berlin Agreement was the provision of an almost 2.9% quota increase for Ireland, a considerably more generous quota allocation than was previously proposed.

Ireland, along with 4 other members, was granted a *specific* quota increase in 2000/01 and 2001/02. At a wider EU level, the *general* EU quota increase (1.5% for each of the other 11 members) will not be made available until 2005. In total, the EU quota increase will amount to 2.4% by 2007/08, which is slightly larger (and 4 years later) than originally proposed. Most importantly, intervention price reductions and the implementation of direct payments, which were to have begun in 2000/01, are also now deferred until 2005.

At the time this analysis was conducted the market weakness stemming from the depressed state of the Russian and South East Asian economies remained a key issue. These concerns were a factor in the discussions to finalise CAP reform for the dairy sector.

The result was a set of reforms which largely put changes in dairy policy, in particular the major issue of quota elimination, on the long finger. The dairy element of the Agreement has resulted in a set of reforms which will be introduced for the most part over the period 2005/06 to 2007/08. The changes in EU dairy policy agreed in Berlin as they pertain to Ireland are shown in Table 2-1.

Table 2-1: Summary of Berlin Agenda 2000 Agreement for Irish Dairy Sector.

	2000/2001	2001/2002	2005/06	2006/07	2007/08
Milk Quota Increase (on 1999/2000 level)	1.83%	2.86%	-	-	-
Intervention Price Reduction (on 1999/2000 level)	-	-	5%	10%	15%
Direct Compensation (IR pence per gallon)	-	-	3.07	6.14	9.21

Source: European Commission Legal Text and own calculations.

2.1 The Outlook for Ireland

In 1999 forecasts for economic conditions in third country markets such as South East Asia and Russia remained poor. Weak demand in these markets was set to continue to affect international dairy product prices. However, relative to previous analysis, a weaker longer term projection for the euro meant that the long term baseline outlook within the EU was more favourable than before.

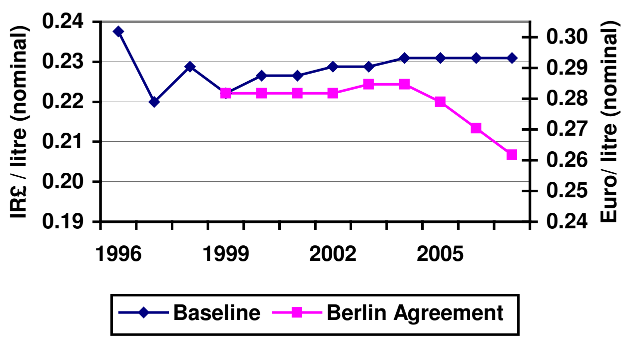
Under the Baseline there would be little change in the price of cheese and SMP over the projection period, with a 2% decline in butter prices between 1998 and 2007. However, under the Berlin

Agreement, by 2007, it was projected that the price of butter would be down almost 10%, the price of cheese down 8% and the price of SMP down 13% on Baseline 2007 levels.

Figure 2-1 shows projections for the Irish producer milk price under the Baseline and Berlin policy scenarios. Under a continuation of Baseline policy, following a dip in 1999, the outlook was for prices to recover towards 1998 levels through the projection period.

Under the Berlin Agreement, in 2001 and 2002 the Irish quota increase and the other specific quota increases were projected to lead to a modest reduction in Irish producer milk prices of the order of 2% relative to the Baseline. Further reductions in the Irish milk price would occur from 2005/06 as the impact of increased quota and lower intervention prices for butter and SMP fed through to farm level milk prices. Under Berlin Agreement policy, by 2007 the Irish milk price was projected to decline to about € 0.26 per litre (94p per gallon) or 11% below its position under a continuation of Baseline policy.

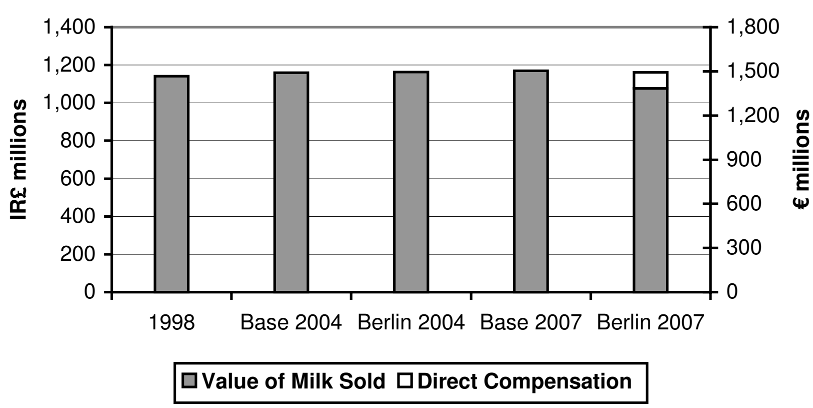
Figure 2-1: Projected Irish Milk Price under Baseline Policy and Berlin Agreement Policy



Source: FAPRI-Ireland Partnership Model.
Note: Milk price shown is standardised 3.7% butterfat (vat inclusive)

While this milk price decline would be substantial, it must be judged within the context of the direct compensation package which was also tabled. Rising in three equal steps from 2005/06, producers will on average receive 25 Euro (£19.70) per tonne (approx. 214 gallons.) of quota milk produced by 2007/08. This equates to a direct payment of about € 0.0256 per litre (9.2 pence per gallon) of quota milk produced. In addition, the increase in quota, would provide an addition to the total revenue from milk sales. Figure 2-2 shows the anticipated revenue accruing to the milk sector over the projection period.

Figure 2-2: Projected Milk Sector Revenue[3] selected years.



Source: FAPRI-Ireland Partnership Model
Note: Base = Baseline Policy. Berlin = Berlin Agreement Policy

Little change was projected in milk sector revenue in the initial years of the agreement under either the Baseline or Berlin scenarios. The decline in milk price under the Berlin agreement following the

[3] Milk Sector Revenue = Value of Total Milk Output + Total Milk Direct Payments

allocation of the specific quota increases, is counteracted in aggregate terms by the growth in the volume of milk output. By 2007 the intervention price reductions and the general EU quota increases will be on stream, as will the direct payments package. So while the value of milk produced by the sector will decline - when the direct payments are included, the revenue of the sector is projected to decline only marginally compared with a continuation of existing policy.

Dairy Sector Conclusions
Based on this analysis the impact of the Agenda 2000 Berlin Agreement for the dairy sector would be modest. While milk prices are set to decline, a substantial portion of this decline is counteracted by the increase in milk quota and the introduction of direct payments to producers. However, all prices shown here are in nominal terms.

3 Exchange Rates and their Effect on the Dairy Sector.

This section of the report focuses on an analysis published in March 2000. Significantly, the Baseline assumptions in this analysis differed from the Baseline assumptions of the previous two analyses. This is because the Agenda 2000 Berlin agreement had by this time been accepted and thus was incorporated in the Baseline. This Baseline is then compared with the alternative scenario involving differing assumptions about the future value of the euro versus the dollar.

The underlying assumptions of the baseline are that Agenda 2000 is implemented as set out in the Berlin Agreement, and that the WTO Millennium round does not force further concessions by the EU on export refunds or other market management tools.

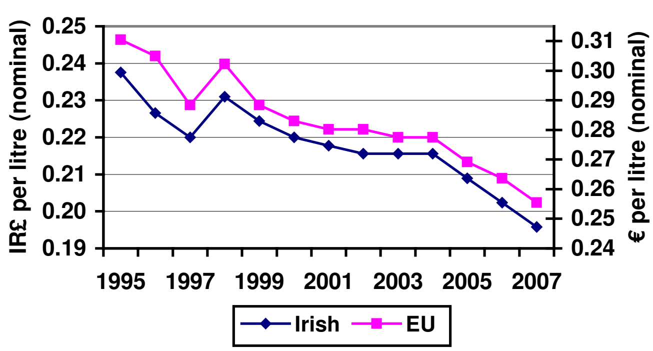
In this baseline analysis, it is further assumed that the euro would begin to recover through the latter half of 2000 from its position in early 2000 at close to parity with the dollar and continue to appreciate gradually over the following two years to reach a sustained rate of $1.22 over the rest of the projection period (see Figure 3-1).

3.1 The Outlook for Ireland

The increase in quota and the reductions in intervention support are projected to have greatest implications for butter prices. The extent of the decline in SMP prices is more modest. At the time the analysis was conducted recent prices for SMP had been particularly low due to poor demand in key markets and it was conceivable that improving demand conditions in importer countries could moderate the extent of decline in SMP prices caused by the CAP reforms.

Figure 3-1 shows projections for the Irish producer milk price under the Baseline scenario. Under a continuation of Baseline policy, prices decline slightly from current levels out to about 2004 and then a more appreciable decline takes place as the bulk of the Agenda 2000 reforms are implemented.

Figure 3-1: Irish and EU Producer Milk Price (3.7% fat) under Baseline Assumptions

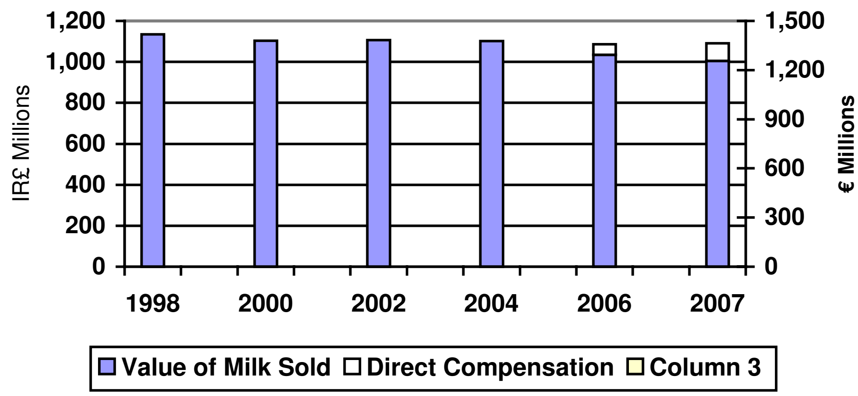


Source: CSO and FAPRI-Ireland Partnership Model.
Note: Milk price shown is standardised 3.7% butterfat (vat inclusive)

Under the terms of the Berlin Agreement, in 2001 and 2002 the Irish quota increase and the increase in quota in some other member states is projected to lead to a modest reduction in average EU and Irish producer milk prices of the order of 2%. Further, more substantial, reductions in the Irish milk price occur from 2005/06 as the impact of increased quota and lower intervention prices across the EU feeds through to farm level milk prices. By 2007, the Irish milk price in the baseline analysis is projected to decline to about € 0.25 per litre (89p per gallon) or 15% below its 1998 level. [4] This is a lower price than projected in previous analyses and reflected the less optimistic market outlook for the sector at this time. By comparison, in the analysis of March 1999, in Section 2 of this report, the comparable projection was for a price of € 0.26 per litre (94p per gallon) in 2007.

In addition to receipts for milk sales, a direct compensation package for milk production also forms part of Agenda 2000. Figure 3-2 shows the anticipated revenue accruing to the milk sector over the projection period on a calendar year basis.

Figure 3-2: Projected Baseline Irish Milk Sector Revenue[5] for selected years.



Source: CSO and FAPRI-Ireland Partnership Model

There is a slight progressive decrease in milk sector revenue out to 2007 under the Baseline. In the early years of the projection, there is some decline in value of milk output following the allocation of the specific quota increases, but this is counteracted somewhat in aggregate terms by the growth in the volume of milk output. As a result, the value of the sector by 2004 is little affected by the policy change.

By 2007 the intervention price reductions and the general EU quota increases will be on stream, as will the direct payments package. So while the value of milk produced by the sector will decline more markedly at that point, much of this revenue decline is counteracted by the introduction of direct payments. By 2007 in the baseline analysis, sector revenue, which is shown in nominal terms, is down by less than 4% relative to 1998.

All prices shown here are in nominal terms, so no allowance is made for inflation. These projections were conducted under a specific euro exchange rate assumption supplied to FAPRI as indicated in Figure 3-1 below. The exchange rate suggested that the euro would appreciate quite strongly against the dollar. However, the the euro continued to decline against the dollar in the course of conducting this analysis, and this prompted an examination of the implications of alternative exchange rates to those used in the Baseline for the dairy sector. The results of the analysis with alternate exchange rates are reported in the next section.

3.2 Exchange Rate Simulations

The two major reforms[6] of the Common Agricultural Policy (CAP) in the last decade have had the specific aim of bringing EU commodity prices closer to the corresponding world commodity prices. The aim of the EU Commission in particular is to bring the EU to a position where its commodities can compete with produce on the world market, without recourse to export subsidies. This means that the exchange rate between the euro and the dollar will assume far greater importance in years to come

[4] It is also worth noting that if milk fat content increases with expectations, the extent of decline in the actual fat milk price will be smaller. Of course equally, the volume of milk that can be delivered at higher fat levels without attracting super levy would also decline.
[5] Milk Sector Revenue = Value of Total Milk Output + Total Milk Direct Payments
[6] McSharry (1992) and the Agenda 2000 (1999).

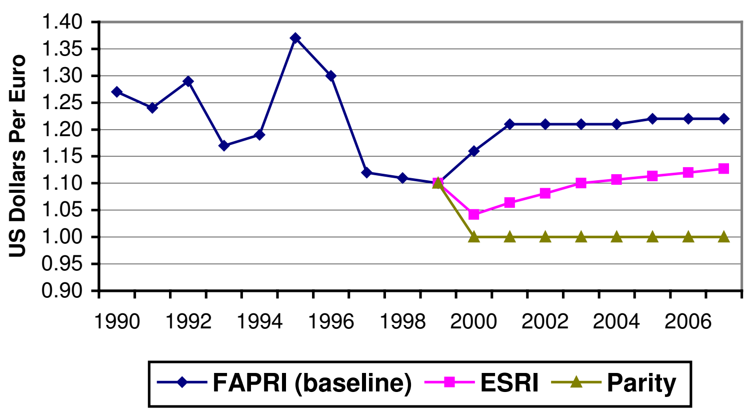
as EU prices move closer to those which prevail on external world markets. Thus in conducting the analysis, the rate of exchange between the euro and the dollar can have substantial implications for the prices projected for many different agricultural commodities and in turn the production response of the different countries within the major trading blocs.

Because of the growing importance of the exchange rate in EU agriculture commodity markets, projections on the basis of differing exchange rate assumptions are useful. In doing this, the following issues are thereby addressed:

- In general most would agree that the euro to date has not performed as most experts had envisaged against the US dollar and several other major currencies. By providing the results of additional exchange rate scenarios additional information is available to the policy maker.
- The sensitivity of the agricultural sector, and in turn the projections, to the volatility of exchange rate movements is identified and quantified.
- By quantifying the implications for the international trade in EU commodities, one can establish a context for the potential implications of future policy changes such as WTO agreements or enlargement of the EU.

Consequently, analysis for two alternative exchange rates was also conducted. The first was an ESRI exchange rate forecast for the dollar/euro rate. This involved the euro appreciating over the projection period but not quite as strongly as in the baseline. By 2007 under the ESRI projections, the euro appreciates to a value of $1.13. The final scenario involved keeping the dollar/euro relationship at parity for the 2000-2007 period. The FAPRI-Ireland model was then used to trace the effects of these two alternative exchange rate scenarios. Results for the different sectors and overall income were then compared with the baseline exchange rate results. Figure 3-1 plots the paths of the 3 different exchange rates used in the analysis. The results for the milk sector under the different exchange rate paths are analysed below.

Figure 3-1: Baseline and Alternative Scenario Exchange Rates



Source: FAPRI and ESRI

3.3 Milk Sector under Differing Exchange Rate Assumptions

Milk production is one of the EU's most protected agriculture sectors. It is therefore not surprising that the differing exchange rate assumptions adopted in this analysis do not have major implications for the sector. Two factors are important in this outcome:

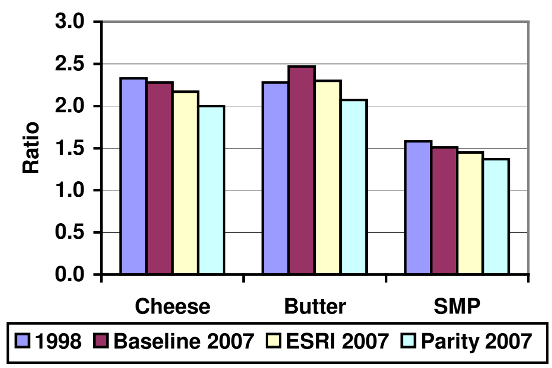
- EU dairy product prices tend to be well above 'world' prices, although there is some variation in the percentage difference across products.
- The milk quota system, through its cap on output, prevents any supply response to changes in milk prices induced by the effect of exchange rates on product prices.

Figure 3-1 show the ratio of EU Internal product prices to a measure of 'world' price (in the form of the FOB Northern European Port price) for the respective dairy products. For unsubsidised exports to take place on a price competitive basis,[7] this ratio would have to be less than 1. As shown below, there is no scope for unsubsidised exports of either cheese, butter or SMP, even under the most favourable dollar/euro scenario. The EU internal SMP price comes closer to a 'world' price than either butter or cheese under the parity scenario, but EU SMP prices are still over 30% above world prices at that point.

International commodity prices are denominated in dollars. Hence, relative to the Baseline, the gap which must be filled by export refunds in order to export product from the EU is smaller under the ESRI exchange rate scenario and smaller still under the parity exchange rate scenario. Consequently, the weaker euro allows a greater volume of exports from the EU under the ESRI and parity scenarios than under the Baseline. This is because the weaker euro implies a lower cost to the EU budget (in terms of export refunds) per tonne of product exported. This would facilitate higher levels of exports from the EU, resulting in lower stock levels, higher internal EU product prices and ultimately higher farm milk prices than would otherwise have been the case.

With no scope for a supply response to higher prices because of the quota restriction, the impact on the milk sector ends there. In this analysis a weaker euro against the dollar results in higher milk prices and boosts the overall value of the sector. Under the ESRI exchange rate scenario, Irish milk prices would be up about 3% on the baseline in 2007 at close to € 0.26 per litre(93p per gallon). Under the parity exchange rate scenario, the milk price would be 6% up on the baseline 2007 position at €0.268 per litre (96p per gallon). With no change in milk output, the value of the milk sector under each scenario would also increase by similar amounts relative to the baseline.

Figure 3-1: Ratio of EU Internal Price to FOB Northern European Ports Price under Different Exchange Rate Scenarios



Source: Young and Westhoff (2000).

It could be argued that the Commission might take advantage of the weak euro to make budgetary savings by reducing export refunds, thereby eroding the beneficial effect which the euro exchange rate could have on milk prices. Nevertheless, it cannot be stated with any certainty that this would be the Commission's course of action.

Conclusion

This exchange rate analysis shows the importance of the euro/dollar exchange rate in determining commodity prices and also highlights the importance of the future value of the euro/dollar exchange rate in the context of the EU's WTO export refund commitments. Other things being equal, any commitment by the EU to further reduce export refund limits, would place a greater restriction on EU exports were the euro to appreciate against the dollar.

[7] Unsubsidised exports from the EU of non commodity specialist cheese types do take place. These compete on attributes other than price.

Related Reading:

Agricultural sector outlook for Ireland
Binfield J., T. Donnellan and K. McQuinn (2000). Proceedings Outlook 2000: Medium Term Analysis for the Agri-Food Sector. Dublin.

An Econometric Model of the Irish Beef Sector for Policy Analysis (ARMIS 4432).
Binfield, J. (2001) Teagasc, Dublin.

The Impact of the Berlin Agreement on Irish Agriculture
Binfield J., T. Donnellan and K. McQuinn (1999) Paper presented to Agricultural Economics Society of Ireland. Dublin. May 31.

Dairy Sector Outlook for Ireland
Donnellan, T., W. Fingleton, M. Keane, P. Enright, D. and O'Connor, (1998) Proceedings Agri-Food Economics Conference 1998. Teagasc, Dublin.

Potential Impact on Ireland of Milk Quota Abolition or Enlargement.
Donnellan T., W. Fingleton, T.Hennessy, T.Leavy, E.O'Leary and E.Pitts. (1999). Report Commissioned by Irish Farmers Association. Teagasc, Dublin.

Economic Analysis of Policy Changes in the Crops Sector (ARMIS 4400).
Kelly, P. and McQuinn, K. (2001) Teagasc, Dublin.