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BUREAU VOOR DE STATISTIEK DER EUROPESE GEMEENSCHAPPEN
SERVIÇO DE ESTATÍSTICA DAS COMUNIDADES EUROPEIAS

L-2920 Luxembourg — Tél. 43 01-1 — Télex COMEUR LU 3423
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Signs and abbreviations employed

EC	European Community
EU	European Union
EUR 12	The twelve Member States of the European Union in 1994
Eurostat	Statistical Office of the European Communities
GATT	General Agreement on Tariffs and Trade
OECD	Organization for Economic Co-operation and Development
MSt	Member States
B	Belgium
DK	Denmark
D	Germany
D11	Germany as before 03.10.1990
D16	Germany as after 03.10.1990
GR	Greece
E	Spain
F	France
IRL	Ireland
I	Italy
L	Luxembourg
NL	Netherlands
P	Portugal
UK	United Kingdom
AWU	Annual Work Unit
DM	German Mark
ECU	European Currency Unit
EMS	European Monetary System
PPS	Purchasing Power Standard
IND	Indicator of income to the branch of agriculture
TIAH	Total Income of Agricultural Households
VAT	Value-Added Tax
CAP	Common Agricultural Policy
FADN	Farm Accountancy Data Network
EAA	Economic Accounts for Agriculture
ESA	European System of integrated economic Accounts
GVAmp	Gross Value Added at market prices
GVAfc	Gross Value Added at factor cost
NVAfc	Net Value Added at factor cost
NTI	Net Total Income
NFI	Net Family Income
"1990"	[1989+1990+1991]/3
"1994*"	[1993+1994]/2
:	not available
mio	million
P	period ("1981"/"1993")
SSP	Sub-period

1 Introduction

In 1995 - as in previous years - Eurostat has undertaken to publish the results of estimates of recent changes in agricultural income in the Member States and in the European Union as a whole. The calculations are based on data provided by the appropriate national authorities. Users of this publication will find information on and analyses of the income situation in agriculture and how this is changing. As the findings are of great importance for a better understanding of the European Union's agriculture, Eurostat endeavours to improve and extend the analysis procedure each year.

This publication focuses on changes in agricultural income in the Member States and in the European Union as a whole for 1994 compared with 1993, as well as analyses and comments. These analyses chart the effect of the different factors on changes in incomes in 1994 (Chapters 2 and 3), place recent results in the context of changes in agriculture within the European Union and Member States since 1980 (Chapters 4 and 5), and allow comparisons of absolute levels of agricultural income between Member States (Chapter 6).

The figures are based on the last available estimates (**January - February 1995**) from the appropriate national authorities regarding probable changes in prices, quantities and values for the products and the charges which determine income in the agriculture sector. The methodology applied is that of the Economic Accounts for Agriculture (EAA)[1]

Three Indicators have been derived from the EAA to show unit income trends in agriculture.

The **net value added at factor cost in agriculture** is calculated by taking the value of final agricultural output and deducting intermediate consumption, depreciation and taxes linked to production, and then adding subsidies[2]. By deflating this figure by the implicit price index of gross domestic product at market prices[3] and dividing by the volume of total labour input in agriculture[4], **Indicator 1** is obtained.

Net income from agricultural activity of total labour input is calculated by subtracting rents and interest payments from net value added at factor cost. This figure, when deflated by the same price index referred to above and divided by the volume of total labour input in agriculture, gives **Indicator 2**.

Net income from agricultural activity of family labour input is calculated by deducting the compensation of employees from the net income from agricultural activity of total labour input. This figure is then deflated like the two previous ones and divided by the volume of family labour input only (the holder and members of his family working on the holding) to give **Indicator 3**.

To calculate Indicators 2 and 3, more information is needed than for calculating Indicator 1: data on rents and interest for Indicator 2, and on the compensation of employees and the breakdown into family and non-family (salaried) labour input for Indicator 3. Full harmonization of these variables has yet to be achieved totally in the Member States. For this reason, the analysis centres on Indicator 1, which is more reliable and has better comparability than the other two.

Changes in agricultural income in 1994 for the European Union as a whole are presented and analysed in Chapter 2 of this report and then broken down by Member State in Chapter 3. The data for Germany (and hence for EUR 12) refer to Germany in its territorial situation after 03.10.1990.

Changes in agricultural income over a longer-term are the subject of a more detailed analysis in this report, as it was last year, with the European Union as a whole being dealt with in Chapter 4 and the individual Member States in Chapter 5. The period under consideration runs from 1980 to 1994, which enables Portugal (for which the relevant data series are available only from 1980 onwards) to be included in the analysis. As for the Chapters dealing with short-term changes, there is a detailed analysis of the factors determining the development of the three income Indicators. The period chosen is divided into three sub-periods, denoted by the "years" which are calculated as the averages of three years in order to lessen the impact of sharp short-term fluctuations. With the Economic Accounts for Agriculture only being available

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1 cf. Eurostat *"Manual on Economic Accounts for Agriculture and Forestry"*, Theme 5, Series E, Luxembourg 1989 (and *Addendum*, 1992).

2 cf. *"Methodological Note A.1"* on the calculation of agricultural aggregates.

3 cf. *"Methodological Note A.4"* on the calculation of the deflated series, especially for the European Union as a whole.

4 cf. *"Methodological Note A.2"* on the definition and measurement of the agricultural labour input.

since 1990 for Germany in its territorial situation after the 03.10.1990, the analysis of the long-term development of agricultural incomes in Germany and the European Union as a whole is presented firstly according to their territorial situation before the 03.10.1990 for the period "1981"/"1992" and then straight afterwards according to their territorial situation after the 03.10.1990 for the period "1991*"/"1994*"[5].

The analyses and comments on the development of agricultural income presented in Chapters 2-3 (short-term changes) and 4-5 (long-term changes) of this report are mainly related to changes in real terms (deflated). In effect, while studying nominal changes can be of some interest in a national context, it is much less relevant when calculating European Union aggregates or when establishing comparisons between countries with very different inflation rates.

Although annual changes in income remain the central element for analysis, **absolute agricultural income levels** per annual work unit in each Member State are compared in Chapter 6, in spite of considerable methodological and statistical reservations. With a view to improving the comparability of incomes, figures are converted on the basis of both the ECU and purchasing power standards (PPS)[6]. A comparison is also made of the development in the absolute levels of agricultural incomes per annual work unit between the Member States.

It should be noted that the agricultural income concerned in the Chapters mentioned so far is based on **macro-economic and national data**. The figures therefore reflect the average development of agricultural incomes, without any possibility of differentiation according to regions or types of holdings. The actual level of income may, in some cases, deviate substantially from the averages given in this report.

Furthermore, the Indicators relate only to the agricultural **branch**. When interpreting results, it should be remembered that to obtain the disposable income of agricultural holders, income from non-agricultural sources (other activities, salaries, welfare benefits, property income) should be added and personal taxes and social payments deducted.

In this respect, Chapter 7 of the current report reveals the state of progress in the work as well as the principal results from the statistics of the Total Income of Agricultural Households (TIAH). In the first part, the objectives of these statistics are recalled and the methodological framework in which they have been established (the definitions of the agricultural household, income and socio-professional groups). The main conclusions are then presented according to four distinct types of analysis: the influence of the different definitions of the agricultural household on the number of agricultural households in the TIAH statistics, the composition of the total income of agricultural households, the stability of this income and its diverse components and, finally, the level of the total income of agricultural households in comparison to that of households as a whole.

5 "1991*" = (1990+1991)/2 and "1994*" = (1993+1994)/2.

6 For a definition see Eurostat: *"Purchasing power standards and gross domestic product in real terms, results 1985"*, Theme 2, Series C, Luxembourg 1988.

2 Changes in agricultural income in the European Union in 1994 over 1993

2.1 Summary of the main results

The estimates of the Members States that were available in January-February of 1995 indicate a rise of +6.7 % in agricultural income as measured by real net value added at factor cost per annual work unit (**Indicator 1**)[1] in the European Union as a whole (in its territorial situation as of 31.12.1994). In spite of a slight deterioration in 1992 (the extent of which was reduced in revisions[2]), agricultural incomes have been fairly unchanged since the rise of 1989 (+11.9%, an exceptional year for agriculture in the European Union). The strong increase recorded for 1994 (after +0.2 % in 1993, a revised figure) means that agricultural income, expressed per unit, reached its highest level for more than 15 years. It is now almost 7 % above its level in the base year "1990".

The change in real net agricultural income per AWU of total labour input (**Indicator 2)** is estimated to have been +8.5 % in 1994 (after +0.8 % in 1993). It was not possible to calculate the real net agricultural income per AWU of family labour input (**Indicator 3)**, because the compensation of employees in Germany could not be estimated on a comparable basis to that of the other Member States, due to the particular situation of agriculture in the five new ""Länder"".

This increase in agricultural income for 1994 can be explained by the following factors:

- the continuing application of the reform of the Common Agricultural Policy (CAP) which resulted, for the second successive year, in a further decline in support prices for cereals and cattle, in measures designed to control output and in the upgrading of direct compensatory payments[3];
- a phenomenon of real prices, which benefited from the stabilization of the agricultural markets, catching-up (or stabilizing), after the severe falls recorded for 1993 (and 1992 for certain products) in the wake of structural imbalances (pigs and wine) or short-term economic factors (in particular fresh fruit, fresh vegetables and potatoes);
- a lower output volume for some products, partly due to climatic conditions (potatoes, sugarbeet and wine) or veterinary problems (pigs).

These factors were reflected in:

- a fall (-0.8 %) in the volume of final agricultural output, particularly as a result of declines for cereals (-3.1 %), cattle (-2.7 %) and pigs (-1.3 %);
- a rise in the real price of final output (+0.6 %) for the first time since 1989, mainly because of a higher real price for crop output (+3.5 %, owing particularly to potatoes, fresh fruit, fresh vegetables and wine), since the real price of animal output declined by -2.0 % (falls recorded for all products with the exception of sheep and goats);
- a decline in the real value of intermediate consumption (-1.7 %);
- a steep rise in subsidies (+8.1 % in real terms), mainly due to the upgrading of the compensatory payments introduced in the context of the reform of the CAP (only 86 % of the aid available for the 1994/1995 marketing year was taken into account in the calculation of agricultural income for 1994);
- a fall in the volume of total agricultural labour input by -2.6 % (although this represents a clear slow-down over 1993, -5.2 %).

Expressed in nominal terms, the value of **final agricultural output** increased by +2.6 % in 1994 (comprised of +3.5 % for nominal prices and -0.8 % for the volume of output). The slight fall in the volume of final output

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1 See *Methodological comment A.3* on the method of calculating short-term changes for EUR 12

2 This fall in agricultural income (-3.1 %, with Germany in its territorial situation before 03.10.1990) turned out to be less important than initial estimates stated (- 3.5 % in January 1993 and - 5.4 % in January 1994); some of these have been revised upwards substantially (Germany, Italy and Belgium).

3 It should be noted that, contrary to the year 1993, the agri-monetary adjustments had only a marginal impact on the prices and aids paid in national currencies.

followed a larger decline recorded in 1993 (-2.5 %), which was the first significant fall in the volume of output since 1981. The nominal value of **crop output** increased by +5.6 % owing to a strong rise in nominal prices (+6.7 %, all the main products being affected, especially potatoes, fresh fruit, fresh vegetables, olive oil and wine but with the exception of cereals) and despite a fall in the volume of output (-1.1 %, mainly due to cereals, root crops, wine and olive oil). The nominal value of **animal output** remained unchanged (0.0 %), with the increase in nominal prices of +0.6 % being offset by the fall in the volume of output (-0.6 % on average, with a fall in the volume of cattle and pig output combining with an unchanged volume of milk and sheep and goat output, and an increase in the volume of poultry and egg output). The development of the nominal prices of animal output was also uneven; prices increased in the case of pigs and sheep and goats, remained stable for milk and cattle, and declined for poultry and eggs.

The reform of the Common Agricultural Policy and the support system for agriculture

The reform of the Common Agricultural Policy (CAP) mainly affects the arable crop and cattle sectors. Decided on in the Spring of 1992, the reform of the CAP came into effect for the 1993/1994 marketing year (with the exception of oilseeds for which the new common market organization was applied from the 1992/1993 crop year). The main objective of this reform is to adapt agricultural output to internal and external demand and thus achieve better market equilibrium and a better competitive position for European Union agriculture.

The main measures adopted in the context of this reform centre on the following three arrangements:

- a reduction in the price of agricultural products: about -8 % for the intervention prices for cereals in 1994/1995, following a reduction close to -25 % in 1993/1994; the abolition of guaranteed prices for protein crops and oilseeds; a reduction of -5 % for the intervention prices for cattle in 1994/1995 (after -5 % in 1993/1994);
- measures to control output (in particular land set-aside);
- compensatory aid for producers (new types of direct compensatory payments and the upgrading of certain types of existing aid), the amount of which rose considerably in 1994/1995.

The reform of the CAP is essentially characterized by the transition from a policy of price support to one more centred towards direct aid to producers. This new orientation of the CAP has caused major changes in the structure and development of agricultural accounts: the fall in prices and volumes of output is reflected by a clear decline in final output and in gross value added at market prices. Nevertheless, the considerable sums paid out in direct compensatory payments and in underpinning existing aid has brought about a very strong increase in subsidies, which has in turn modified the system of supporting agriculture. The amounts paid out for market support (prices and export restitutions) have fallen but direct compensatory aid to producers has risen.

Because of the new importance of the item "operating subsidies" in the composition of agricultural income, it is necessary to highlight that the accounting of operating subsidies is carried out according to the criterion of payment. Therefore, only the operating subsidies actually paid during the 1994 calendar year are thus taken into account in the calculation of agricultural income in 1994. It is estimated that around 86 % of the total amount of aid linked to the reform of the CAP and available for the 1994/1995 marketing year was actually paid out in 1994 and therefore taken into account in the estimate of agricultural income for 1994. However, certain subsidies due for the 1993/1994 crop year and which were not paid to producers until 1994 have also been taken into account in the agricultural income estimate for 1994.

Although the share of crop output in final agricultural output had increased regularly since "1981" to the point of representing slightly more than half, in 1994, the value of crop output constituted a little less than 49 % of the value of final output.

After taking into account the effects of inflation[4], the value of final output fell slightly in real terms (-0.2 %), owing to a fall in output volume (-0.8 %) for which the upswing in real prices (+0.6 %) could not compensate.

[4] See *Methodological remark A4*, on the method of calculating data in real terms (deflated) for EUR 12. The inflation rates used for 1994 in the Member States are given in Table 2.2

This fall in real value was basically due to the development in animal output (-2.6 %, with a fall in real prices of -2.0 %) since an increase was recorded in the real value of crop output (+2.4 %, with real prices having gone up markedly by an average +3.5 % and the volumes having fallen by -1.1 % on average).

The value of **intermediate consumption** rose moderately in nominal terms (+0.9 %), with slight increases in both volume (+0.6 %) and prices (+0.3 %). These last two factors led, for the first time since 1989, to a marked improvement in the "terms of trade"[5] (+3.2 %), although the apparent productivity of intermediate consumption[6] fell slightly (-1.5 %). The rise in the average price for intermediate consumption was below the rate of inflation, which led to its value falling by -1.7 % in real terms.

The developments in intermediate consumption and final agricultural output brought about a considerable rise in **gross value added at market prices (GVAmp)** of +4.2 % in nominal terms (or +1.0 % in real terms). The strong increase in **subsidies**[7] (by +11.3 % in nominal terms or +8.1 % in real terms), mainly reflects the upgrading of measures adopted to compensate for the reduction in price and market support, in the context of CAP reform. By adding subsidies and deducting **taxes linked to production**, which fell by -12.1 % in nominal terms (or -14.6 % in real terms), **gross value added at factor cost GVAfc**) is obtained, which rose by +6.1 % in nominal terms (or +2.9 % in real terms).

Table 2.1 Changes in the three Indicators of agricultural income in the European Union and in the Member States, 1992/1991, 1993/1992 and 1994/1993 (in %)

Etat	Indicateur 1			Indicateur 2			Indicateur 3		
membre	1992	1993	1994	1992	1993	1994	1992	1993	1994
B	-3.6	-3.9	7.3	-6.5	-5.9	8.8	-7.5	-6.5	9.8
DK	-10.1	-1.1	14.6	-23.9	-7.7	34.9	-41.4	-14.3	81.3
D	18.8	-13.1	4.5	20.2	-18.5	4.1	-	-	-
GR	-19.2	-1.5	11.0	-20.0	-1.9	12.5	-21.2	-2.1	13.2
E	-11.7	26.2	13.3	-15.2	33.9	14.3	-17.3	45.3	18.0
F	1.6	-0.6	12.4	1.4	-0.9	14.6	0.8	-2.1	19.6
IRL	19.1	1.1	8.2	22.5	3.6	10.1	24.1	4.1	11.0
I	-1.8	-2.1	-5.1	-2.7	-1.2	-3.0	-9.9	-2.0	-1.9
L	0.9	0.5	-0.8	-1.3	-0.2	-0.2	-1.4	-0.2	-1.8
NL	-10.9	-13.1	13.3	-12.6	-17.0	18.0	-16.7	-25.5	28.0
P	-13.5	-18.3	20.5	-17.7	-20.5	32.3	-21.9	-29.4	46.6
UK	5.6	13.6	3.7	11.1	22.0	5.1	19.3	36.2	5.9
EUR 12	-1.2	0.2	6.7	-1.8	0.8	8.5	-	-	-

Similarly, by deducting **depreciation** (+2.3 % in nominal terms and -0.5 % in real terms) from GVAfc, **net value added at factor cost (NVAfc)** is obtained, which itself rose by +7.2% on average in nominal terms for the European Union as a whole and by +3.9 % in real terms.

The volume of **total agricultural labour input**, expressed in annual work units, declined by -2.6% and amplified the impact of this higher value added on **Indicator 1,** which increased by +6.7 %.

The moderate increase in expenditure on **rents** and particularly the large fall in **interest payments** (+3.9 % and -3.5 % in nominal terms respectively, or +1.0 % and -6.1 % in real terms, with these trends therefore being below the rise in GVAfc) partly explain the increase in **Indicator 2** (+8.5 %), which was greater than that of Indicator 1: **net income of total labour**, the basis of Indicator 2, did in fact go up by +9.1 % in nominal terms (as against +7.2 % for NVAfc) and by +5.7 % in real terms (as against +3.9 % for NVAfc).

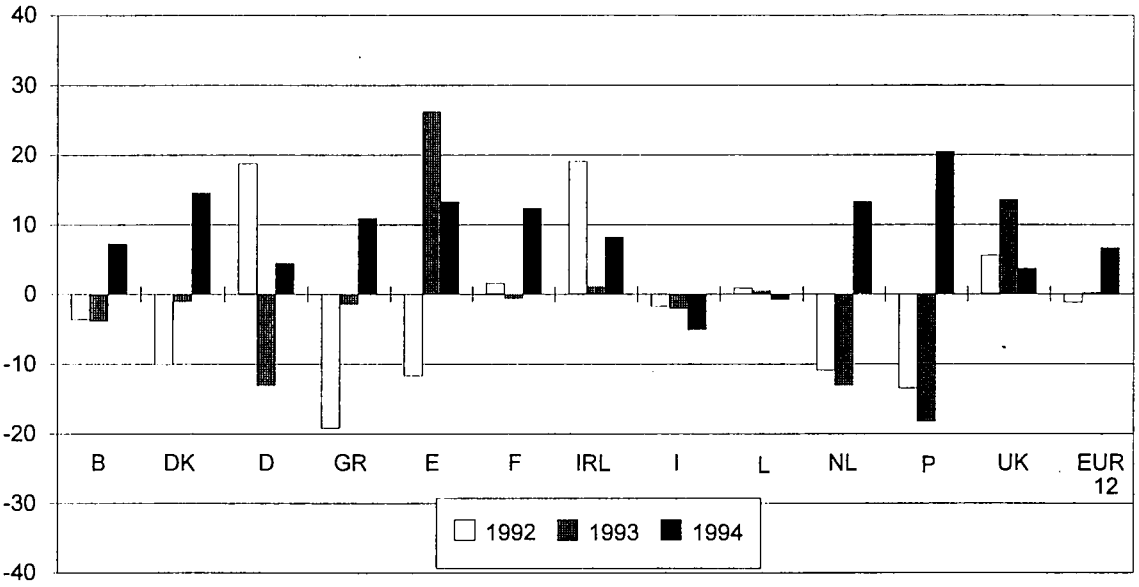
5 The "terms of trade" (also called "price scissors") in agriculture is the relationship between the index of the nominal prices of final output and the index of the nominal prices of intermediate consumption.

6 The productivity of intermediate consumption is the ratio between the index of the volume of final output and the index of the volume of intermediate consumption .

7 Within the meaning of the Economic Accounts for Agriculture, subsidies comprise only current direct transfers to agriculture with the notable exception of price support (the effect of which appears in producer prices themselves), investment aid, aid paid to the agro-food industry (even if intended to support agricultural production) and transfers to agricultural households. The development in subsidies is therefore not totally representative of that of overall support to agriculture.

As comparable data are not available for Germany, the item **compensation of employees** could not be calculated for the European Union as a whole, nor could the resulting variations in the income aggregates, i.e. net income of family labour and Indicator 3 of agricultural income. Nevertheless, it can be indicated that for the other eleven Member States (EUR 12 excluding Germany), the cost of the compensation of employees did decrease slightly in nominal terms by -0.7 %, which represents a fall of -3.4 % in real terms. This led an increase in **net income of family labour** of +14.6 % in nominal terms and +10.8 % in real terms. With a fall in the volume of **family labour input** of -1.8 %, **Indicator 3** of agricultural income rose by +12.8 % on average for these eleven Member States (EUR 12 excluding Germany)[8].

Graph 2.1 The changes in agricultural income Indicator 1 in the European Union and in the Member States, between 1992 and 1994 (in %)



Agricultural income developed in different ways in the **Member States** in 1994, partly because of differing situations at the outset carried over from previous years and partly because of the diversity of the agro-economic structures and economic realities in the European Union. Measured by Indicator 1, for example, income for 1994 increased by more than 10 % in Portugal (the steepest rise), Denmark, Spain, the Netherlands, France and Greece. The rises were more moderate in Ireland, Belgium, Germany and the United Kingdom. Finally, Luxembourg and particularly Italy recorded a decline in their agricultural income. In the case of Italy, this was the third consecutive fall. The higher levels of agricultural income in 1994 generally offset the falls observed in 1993, with the exceptions of Germany, Portugal and the Netherlands where these falls had been greater than 10 %. Ireland and the United Kingdom are the only countries to have registered increases for the last three consecutive years.

Graph 2.2 places the changes in agricultural income in 1994 for the Member States in a **medium-term** perspective. The index of real net value added at factor cost by annual work unit (Indicator 1) is calculated from a base = 100, for the average of the three years 1989 to 1991[9] ("1990"); the graph takes the value of this index in 1993 as a departure point and indicates its variation in 1994 as well as the new level of the index for 1994 in each of the Member States.

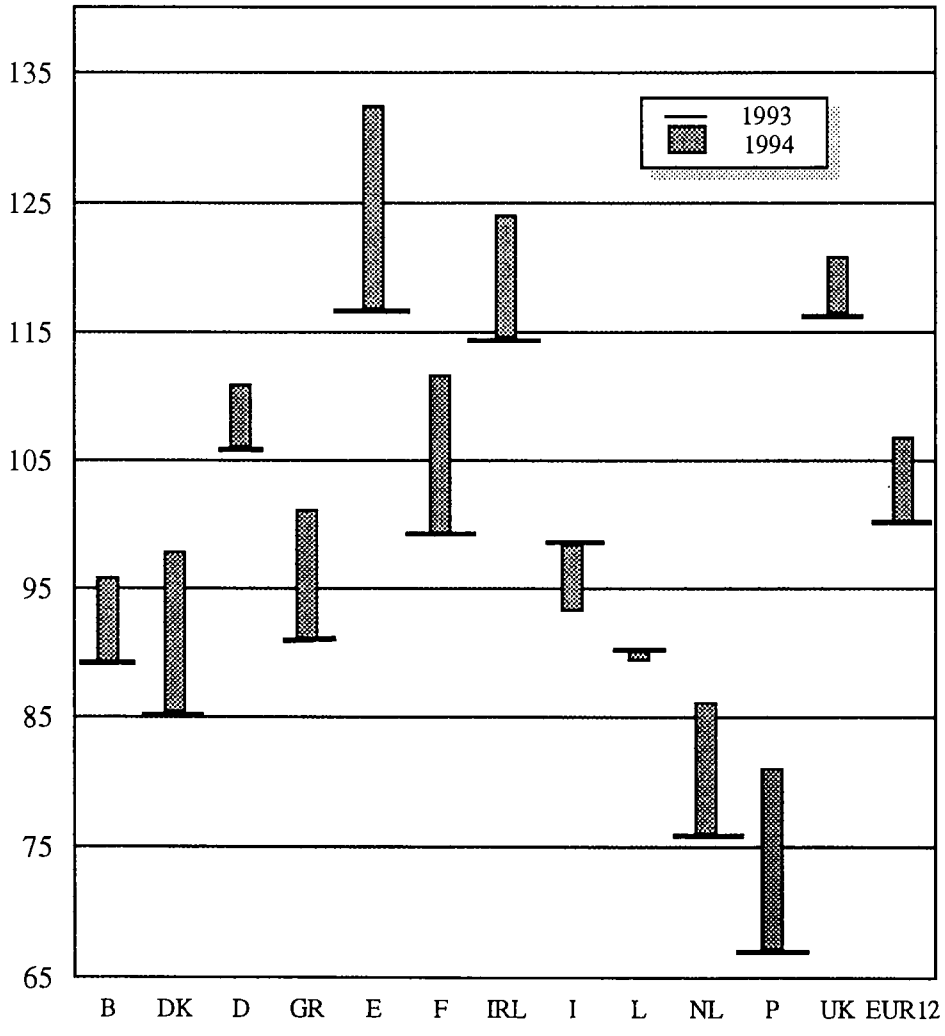
8 Although the fluctuations in Indicator 3 are not directly comparable in 1994, it may be added that they are normally stronger (in both directions) than those of Indicator 2, these in turn being stronger than those of Indicator 1, since the same absolute variations (particularly on the value of output) apply to a smaller residual aggregate: thus, in "1993", net income of family labour, the basis of Indicator 3, for EUR 12 represented only **50** % of gross value added at market prices, as against **71** % for net income of total labour (the basis of Indicator 2) and **90** % for net value added at factor cost (the basis of Indicator 1).

9 With the exception of Germany ((1990+1991)/2) = 100

To interpret the index values given in Graph 2.2, it must be remembered that these do not allow a comparison of the levels of income between Member States but only the comparison of trends since the beginning of the 1990s.

In 1993, the highest indices (in comparison with "1990") were those for Spain, the United Kingdom, Ireland and Germany; these countries were at levels greater than +6 % over their base level in "1990". Portugal and particularly the Netherlands saw their agricultural income diminish by more than -20 % during this period. Greece, Belgium, Denmark and Luxembourg recorded falls of close to -10 %, with the levels in France and Italy remaining at about their levels in "1990".

Graph 2.2 **Indicator 1 in the Member States, indices for 1993 (base 1989-1991 = 100, with the exception of Germany and EUR 12, 1990-1991 = 100) and the changes in 1994**



By adding the changes for 1994, it is clear that agricultural income is confirmed as having increased by most in Spain since "1990" (+32.4 %), with other favourable trends (of the order of +20 % and more) being recorded in Ireland and the United Kingdom (the income level in France also rising by a large amount). With these latest changes, the agricultural income situation has improved in most countries but remains at more

than 10% inferior to the level in the base year in three Member States (Luxembourg, the Netherlands and Portugal).

2.2 Final agricultural output

The volume of final agricultural output is estimated to have declined once more in 1994 (-0.8 %), having already fallen in the year before (-2.5 % in 1993, the steepest fall since 1981). However, this result conceals considerable disparities depending on the product in question (this is discussed further on in this section) and the Member State (see Table 2.2). The four steepest falls (Belgium, Germany, Spain and Italy), from -1.7 % to -3.1%, were due in the main to crop output volumes (from -3.3 % to -6.7 %), with the exception of Germany for which the volume of animal output fell by -4.3 %. In contrast, the development in the volume of animal output was the main reason for the slight decline in final output volume (from -0.6 % to -1.2 %) for three other countries (Ireland, Luxembourg, Netherlands). The decline in the volume of final output in Denmark (-1.1 %) resulted from declines in both animal and crop output.

The increases in three Member States (Portugal, the United Kingdom and Greece (the largest), from +0.7 % to +3.1 %) corresponded to a positive combination of divergent changes to the average volumes of crop and animal output (the steepest rises in crop output volumes were in Greece and Portugal and the steepest for animal output in the United Kingdom). In the case of France, the output volumes of both types of production increased slightly (averaging out at +0.4 % for final output).

In nominal terms, the prices and values of final output increased on average (+3.5 % an +2.6 % respectively), but differences in the rates of inflation between countries render such inter-country comparisons of little relevance. In real terms, agricultural prices went up by +0.6 % on average for the European Union as a whole, leading to a slight decline in the real value of output of -0.2 % (the trend since 1980 was of the order of -2.0 % per annum). This increase in real prices was principally due to the real price of crop output (+3.5 %), since the real price of animal output declined by -2.0 %. The average price of final output rose in real terms in five Member States (Portugal, the Netherlands, Greece, Belgium and Spain), fell in five others (Luxembourg, Ireland, Germany, Italy and the United Kingdom) and remained stable in Denmark and in France.

The real value of output declined slightly on average (-0.2 %), with a fall in six countries (from -0.1 % to -5.3 %) and an increase in six others (from +0.2 % to +6.0 %). With the exception of Luxembourg (-5.3 %), Italy (-2.9 %) and Denmark (-1.1 %), the falls resulted from declines in the values of the animal output which more than offset the rises recorded for crop output. It should be noted that these developments usually have a large bearing on the change in real net value added at factor cost and hence Indicator 1 of agricultural income. This remains true in 1994, although to a lesser extent. Although subsidies had a great influence on agricultural income, the groups of countries obtained by classifying them according to their changes in the real value of final output, and by their changes in real net value added at factor cost, are more or less the same (with the exception of Denmark, Ireland and the United Kingdom).

Table 2.2 Changes in the volumes, prices and values of final agricultural output in the European Union and in the Member States, in 1994 as compared to 1993 (in %).

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
Volume	-3.1	-1.1	-2.7	3.7	-1.8	0.4	-1.2	-1.7	-0.9	-0.6	0.7	0.7	-0.8
Nominal price	5.2	1.6	1.5	18.2	10.4	1.6	0.0	2.1	-1.8	4.0	6.6	1.3	3.5
Nominal value	2.0	0.5	-1.3	17.4	8.3	2.0	-1.2	0.4	-2.6	3.4	7.3	2.0	2.6
Real price	3.4	0.0	-1.3	2.3	6.6	0.0	-2.8	-1.3	-4.4	2.1	1.4	-0.8	0.6
Real value	0.2	-1.1	-4.0	6.0	4.7	0.4	-4.0	-2.9	-5.3	1.6	2.1	-0.1	-0.2
Price index GDPmp	1.8	1.6	2.8	10.7	3.5	1.6	2.9	3.4	2.8	1.8	5.1	2.1	-

The inflation rates (measured by the implicit price index of GDP at market prices) that were used in calculating prices and values in real terms for 1994 (see Table 2.2) varied from one Member State to another, although the general trend was for a clear decline in the rate of inflation with respect to the previous year. The rates of inflation increased in only two Member States (Luxembourg and the Netherlands) with respect to

1993 and fell markedly in two others (Portugal and Greece), with more moderate declines being recorded in the other eight (Belgium, Denmark, Germany, Spain, France, Ireland, Italy and the United Kingdom). The highest rates of inflation in 1994 were recorded in the four Member States in the south of the European Union (between +3.4 % and +10.7 %) whereas Denmark and France had the most moderate rates (+1.6 %), those of the other Member States being between +1.8 % and +2.9 %.

The short commentaries which follow, cover the fifteen main products or groups of products in the agricultural branch of the European Union, the individual proportions of which (measured in current ECU for "1993") vary between 1.1 % (oilseeds) and 18.0 % (milk) of final output, but as whole constitute a total of 92.8 % (no other product exceeding 1 %). In total (i.e. including products on which no comment is given), crop output accounts for 47.7 % and animal output for 51.8 %[10].

2.2.1 Crop output: declines in harvest levels and steep rises in real prices

The nominal value of crop output in the European Union increased steeply in 1994 (+5.6 %). This rise was due to the increase in nominal prices (+6.7 %) which more than offset the decline in the volume of output (-1.1 %). In real terms, producer prices increased by +3.5 % (for the first time since 1989) and the value of crop output by +2.4 %, which represents a clear break with the trend since 1980 (the trend since "1980" being -2.9 % and -1.1 % per year respectively).

The developments in the crop sector are obviously very different from one product to another, particularly because of the different sensitivity of crops to climatic conditions and the diversity of the market situations; in addition, the variations observed in 1994 depend on output and price levels achieved in 1993. This diversity of developments per product leads to considerable differences in the development of crop output between the Member States, also since the breakdown of crop types is very diverse; situations may vary from one country to another, even for the same product.

The value of crop output in real terms fell only in three Member States (Luxembourg, Italy and Denmark). It increased in all the other countries (see Table 2.3), and particularly in five of them (Spain, Belgium and the Netherlands, under the effect of real prices, and in Greece and Portugal under the combined effect of output volumes and real prices).

Table 2.3 Changes in the volumes, prices and values of final crop output in the European Union and in the Member States, in 1994 as compared to 1993 (in %).

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
Volume	-6.7	-1.8	0.0	5.3	-4.3	0.6	0.8	-3.3	0.2	0.2	5.1	-1.5	-1.1
Nominal price	15.6	1.4	6.0	13.2	13.7	3.6	5.3	2.4	-2.1	11.3	11.2	4.5	6.7
Nominal value	7.9	-0.4	6.0	19.2	8.8	4.3	6.1	-1.0	-1.9	11.5	16.8	3.0	5.6
Real price	13.5	-0.2	3.1	2.2	9.8	2.0	2.3	-1.0	-4.8	9.3	5.8	2.4	3.5
Real value	6.0	-2.0	3.1	7.7	5.1	2.7	3.1	-4.2	-4.6	9.6	11.2	0.8	2.4

A study of the changes for the main groups of products (see Table 2.4) shows a substantial decline over 1993 in the harvests of potatoes, sugarbeet, olive oil, cereals and grape must and wine. The generally upward development in the real prices of crop output items offset lower output volumes, so that the real value of the output of these products increased, with the exception of cereals and sugarbeet. The price rises are largely explained by a "catching-up" phenomenon after the severe falls recorded in 1993 (and 1992 for certain crops) owing to the existence of structural or economic imbalances on the markets. The fall in the prices of cereals and oilseeds must be seen in the light of the application of new CAP and the change in the common organization of the markets for these products.

The volume of **cereals** output (which accounted for 9.4% of the final agricultural output of EUR 12 in "1993") declined in 1994 by -3.1% in the European Union as a whole (the only significant increases being recorded in Greece, Germany and the United Kingdom). The fall in output volume over the course of the last few years

[10] The difference (0.5 % of final production) corresponds to "contract work at the agricultural production stage" (normally net new plantations, which means that the figure can be negative for certain Member States) and to a very small adjustment item for Italy.

has to be seen in the context of the measures adopted as part of the CAP reform: the lowering of institutional prices and, in order to benefit from direct compensatory payments, the obligation to set-aside 15% of all the land devoted to cereals, oilseeds and protein plants (with the exception of small producers). It would appear that the significant increase in yields in Greece, Germany (particularly in the new "Länder") and the United Kingdom limited the impact which the reduction in the areas under cereals had on the volume of final output.

While there were big declines in the volume of cereal output in Spain and France (-16.9% and -6.8% respectively, after +6.0% and -8.5% in 1993), other countries recorded substantial increases: volumes in Greece and Portugal rose by +22.3% and +4.2% respectively (1993: -4.8% and +15.4%). It should be noted that this average decline in cereal output was due mainly the result of lower volumes of barley and maize output (-10.5% and -9.9% respectively, after -12.3% and +6.6% in 1993). In contrast, the volume of wheat output was up by +2.5%.

The real price of cereals fell by -6.2% on average in the wake of the further lowering of intervention prices (nearly -8%), despite a better balance on the markets created by the fall in both output and intervention stocks. This fall in real prices was observed throughout the European Union, although the rate of decrease varied (from -0.5% in France and -3.5% in Luxembourg to -14.0% in Portugal). Most of the main cereal producing countries (Germany, the United Kingdom, Spain and Italy) recorded falls in the real price of between -4.7% and -11.3%. The one exception was France, where prices were supported by demand in the second half of the year. The result of these changes was a -9.0% decline in the real value of cereals, with the declines in Spain, Italy and the United Kingdom exceeding -10.0%

Table 2.4 Changes in the volumes, prices and values of the main crop products in the European Union, in 1994 as compared to 1993 (in %)

	Volume	Nominal price	Nominal value	Real price	Real value
Cereals	-3.1	-3.6	-6.6	-6.2	-9.0
Potatoes	-12.0	72.9	52.2	68.0	47.9
Sugarbeet	-9.5	4.0	-5.9	1.3	-8.3
Oilseeds	13.5	0.8	14.4	-1.5	11.8
Fresh vegetables	-0.1	6.2	6.1	3.0	2.8
Fresh fruit (*)	1.8	9.8	11.8	5.9	7.9
Grape must and wine	-2.0	9.1	6.9	6.5	4.3
Olive oil	-7.1	15.8	7.6	10.0	2.2
Flowers and ornamentals	1.3	2.1	3.5	-0.3	1.0
Crop output	-1.1	6.7	5.6	3.5	2.4

* Including citrus fruit, tropical fruit and table grapes.

Harvests of **fresh fruit**[11] (which accounted for 6.1% of the final agricultural output of EUR 12 in "1993"), which had surged in 1992 (+53.0%) and then declined in 1993 (-15.4%), were fairly stable, with an average increase in volume of output of +1.8%. However, the developments in individual countries were highly contrasting since, apart from France (+18.0%), Germany (+3.8%) and Italy (+1.9%) who benefited from more favourable weather, all the countries for which fresh fruit is an important crop recorded lower output volumes. Nevertheless, all the Member States where output volumes were down, except Denmark and the United Kingdom, benefited from big rises in real prices, which led to increases in the real value of fresh fruit. Real prices and values of fresh fruit rose on average by +5.9% and +7.9% respectively, with increases in all Member States apart from Denmark and the United Kingdom.

Following a big increase in 1992 (+23.4%) and a decline in 1993 (-12.4%), the output volume of **wine must and wine** (which accounted for 4.9% of the final agricultural output of EUR 12 in "1993"), like that of fresh fruit, was relatively stable in 1994, falling by just -2.0% (as a result of climatic conditions that were hardly

[11] In this Report, the term "fresh fruit" includes citrus fruit, tropical fruit and table grapes.

favourable and a slight reduction in areas). This average figure hides wide variations ranging from -31.7% in Greece to +22.5% in Germany. Following three years of considerable decline, the real price of wine recovered with an increase of +6.5%. The real price of wine and wine must fell sharply in Luxembourg, remained relatively unchanged in Germany, Italy and Greece, and rose strongly in France, Portugal and Spain. The net result of the various changes was a +4.3% increase in the real value of wine.

A lower volume of **sugarbeet** output (which accounted for 2.6% of the final agricultural output of EUR 12 in "1993") was recorded in all Member States except Ireland and Italy. For the European Union as a whole a there was an average decrease of -9.5% in the output volume. Inclement weather when sowing and in the summer (drought) seriously affected yields causing, together with a slight decline in the area planted, output volumes in the main producer countries to decline by between -10% and -15%. These falls caused prices to rise modestly (+1.3% in real terms) but not enough to make up for the lower volume. The net result was a further fall in the real value of output (-8.3%). The output of **potatoes** (which accounted for 2.4% of the final agricultural production of EUR 12 in "1993") fell substantially in volume terms in 1994 (-12.0%) as a result of inclement weather. Lower volumes were recorded in all Member States except Spain, Ireland and Portugal. Sustained demand and the low price levels of the previous three years triggered a surge in prices (+68.0% on average in real terms, with increases ranging from +21.6% in Luxembourg to +178.5% in Belgium). Higher prices caused the real value of potato output to rise sharply (+47.9%, the biggest increase for any agricultural product).

Following two consecutive years of decline, the output of **oilseeds** (which accounted for 1.1% of the final agricultural output of EUR 12 in "1993") grew by +13.5% in volume terms. Output volumes were higher in most Member States, with the notable exception of Spain and, to a lesser extent, Denmark. Apart from, the improvement in yields after their fall in 1993, it would appear that the high prices seen in the previous season encouraged farmers to grow oilseeds at the expense of other arable crops. Real prices, which in 1993 were buoyed by sustained demand on the world market and a strong dollar, fell back slightly (-1.5% on average) in 1994. This modest decrease masks widely varying changes, including significant increases in Germany, Denmark and in Italy.

The volume of **olive oil** output (which accounted for 1.8% of the final agricultural output of EUR 12 in "1993") fell by -7.1%. This decline, which followed a big increase recorded for 1993, is attributable to the large annual fluctuations caused by the vagaries of climatic and agronomic factors. There were sharp declines in Italy and Spain, but marked increases in Portugal and, to a lesser extent, Greece. Thanks to an increase of +10.0% in the real price (increases were recorded in all the producer countries), the real value of olive oil output rose by +2.2% on average.

The output volume of **fresh vegetables** (which accounted for 9.5% of the final agricultural output of EUR 12 in "1993") was practically unchanged in 1994 (-0.1%). However, this figure conceals some wide variations. There were declines in seven Member States (ranging from -14.9% in Denmark to -1.0% in Belgium), but increases in the five others (ranging from +1.0% in Portugal to +6.1% in Ireland). There were not such wide disparities in the case of developments for **flowers and ornamental plants** (which accounted for 4.6% of the final agricultural output of EUR 12 in "1993"), since the changes in national output volumes were fairly similar to the +1.3% increase for the European Union as a whole. The output volume of flowers was almost unchanged in most Member States, with the changes ranging from -2.7% in Italy (the only country, apart from Denmark, to record a decrease) to +4.1% in the United Kingdom.

The real price of fresh vegetables, in common with those of other crops, increased in 1994 (+3.0%). There were higher prices in most Member States, with only Italy, Luxembourg and Portugal recording falls. The real price rises in three Member States (Denmark, Germany and the Netherlands) exceeded +10%. The result of these changes was a rise of +2.8% in the real value of fresh vegetables, which is better than the long-term trend. The price of flowers rose in nominal terms (+2.1%) but was little changed in real terms (-0.3%), despite significant declines in the Netherlands, Germany and, above all, France.

2.2.2 Animal output: broadly homogeneous picture of lower output volumes and real prices

The animal output sector, which in 1993 was seriously affected by the persistent crisis in the pig sector, was characterized by more unified development in 1994, with fairly moderate declines in output volumes and prices. Although the changes varied between products, the effects on real values were similar, since the

changes were all negative and in a range between -1% and -5%, the one notable exception being sheep and goats, which showed an increase of nearly +2%.

The variations in the animal sector were generally within a much smaller range between countries than those in the crop sector. This applied both to volumes and real prices (whereas changes in nominal prices are more closely linked to inflation rates). (See Table 2.5.) This is because climatic fluctuations do not have any direct influence, and markets for animal products tend to be more uniform. The common organization of the market for the main product (milk) is relatively rigid, and the structures for each product vary little from one country to the next. The first three main animal products -milk, cattle and pigs - are the same in eleven Member States.

Table 2.5 Changes in the volumes, prices and values of final animal output in the European Union and the Member States, in 1994 as compared to 1993 (in %)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
Volume	-0.5	-0.8	-4.3	-0.1	1.5	0.2	-1.5	0.8	-1.1	-1.2	-1.7	2.2	-0.6
Nominal price	-1.0	1.8	-1.4	13.4	6.4	-0.4	-0.7	1.7	-1.7	-1.7	2.7	-0.7	0.6
Nominal value	-1.5	0.9	-5.7	13.2	8.0	-0.3	-2.1	2.5	-2.8	-2.9	1.0	1.4	0.0
Real price	-2.8	0.1	-4.1	2.4	2.8	-2.0	-3.4	-1.7	-4.4	-3.4	-2.3	-2.8	-2.0
Real value	-3.3	-0.7	-8.3	2.3	4.4	-1.8	-4.9	-0.9	-5.4	-4.6	-3.9	-0.7	-2.6

The real value of animal output rose in only two Member States (Spain and Greece), the main reason for the rises being higher real prices. In most of the ten other Member States, the real value of animal output fell fairly significantly, largely reflecting downward prices that were greater than output volume changes (except Denmark and Germany).

Examination of the changes for each product (see Table 2.6) reveals that the volumes of poultry and egg output increased, while those of milk and sheep and goats edged down slightly and those of pigs and cattle fell more steeply. Real prices declined for all products except sheep and goats (+2.1%). The real price of pigs seemed to have stabilized albeit at a low level following the collapse in 1993. At European Union level, the real prices of other animal products fell by between -1.8% and -7.4% on average.

Table 2.6 Changes in the volumes, prices and values of the main items of animal output in the European Union, in 1994 as compared to 1993 (in %)

	Volume	Nominal price	Nominal value	Real price	Real value
Cattle (including calves)	-2.7	-0.2	-2.9	-2.7	-5.3
Pigs	-1.3	2.4	1.1	-0.1	-1.4
Sheep and goats	-0.3	6.0	5.7	2.1	1.8
Poultry	2.6	-1.0	1.5	-3.6	-1.1
Milk	-0.2	0.8	0.6	-1.8	-2.0
Eggs	3.8	-4.7	-1.1	-7.4	-3.9
Animal output	-0.6	0.6	0.0	-2.0	-2.6

Changes in the output volume of **cattle** for meat (including veal) (which accounted for 12.4% of the final agricultural output of EUR 12 in "1993") were relatively varied in the European Union in 1994, with declines in seven Member States, increases in just four and no change in one (Belgium). On average, output volumes fell by -2.7%, this being the second successive decline (1993: -5.2%). However, the big cyclical decline in the European cattle herd appears to have levelled off in 1994, although national changes in each category of animal varied quite widely. There was a very definite slowdown in the transfer of dairy cows to sucklers. Slaughterings declined in the first half of 1994, but picked up again slightly towards the end of the year. The resultant fall in supply went some way to restoring the balance in the market for beef meat, which was characterized by the absence of any support buying for more than a year and by intervention stocks that were at historical lows.

The average price benefited from this reduced supply, remaining firm and edging down by just -0.2% in nominal terms. It appears that the latest reduction in institutional prices (about -5%) agreed on as part of the CAP reform, only had a partial effect on market prices. Nevertheless, in real terms the decline in the price was more marked (-2.7%), with falls recorded in the overwhelming majority of Member States. This decrease in the real price, combined with a lower output volume, caused the real value of cattle output to fall by -5.3%.

Pig output (which accounted for 10.2% of the final agricultural output of EUR 12 in "1993") declined in volume terms by -1.3% in 1994, ending several years of uninterrupted increases. This fall was particularly felt in Germany, Belgium and the Netherlands, due in part, in the case of the first two of these countries, to swine fever. Despite continuing high levels of supply and persistent structural imbalance, the market for pigmeat in 1994 benefited from the reductions in output volume and in the size of the pig herd (the decline in the latter affecting almost all types of pig). Moreover, demand was sustained by the low prices of pigmeat recorded in 1993. The resultant recovery meant that market prices stabilized but at a low level (+2.4% in nominal terms, -0.1% in real terms). As a result, the real value of final pig output declined by -1.4% in 1994.

In 1994, after four consecutive annual increases, the volume of **sheep and goats** output (which accounted for 2.0% of final agricultural output in EUR 12 in "1993") fell slightly (-0.3%) in the European Union as a whole. This almost unchanged figure conceals a range of trends at national level, with falls in France and Ireland being offset by a strong rise in Spain, and output volumes in the two other main producer countries (the United Kingdom and Greece) remaining stable. The fall in supply was due to changes in the system of awarding ewe premiums, which influenced the management of the sheep herd. Lower output volumes benefited prices, which rose by +2.1% in real terms (the only example of an increase in real prices in animal output in 1994).

The volume of **poultry** output (which accounted for 4.9% of the final agricultural output of EUR 12 in "1993") rose by +2.6% in 1994, thus extending the sustained growth of recent years. This latest increase in output volume was shared by all Member States except Luxembourg and the Netherlands, where volumes declined. Changes in real prices were fairly similar in the great majority of Member States, with an average decline of -3.6%. The combined result of these changes was a -1.1% fall in the real value of poultry output.

The volume of **egg** output (which accounted for 2.6% of the final agricultural output of EUR 12 in "1993"), like that of poultry, grew in 1994 (+3.8% for the European Union as a whole). This strong expansion checked two years of declines, and was shared by most of the main producer countries. However, this development in supply provoked a considerable reduction in real prices, which fell by -7.4% (the biggest fall in the real price of any agricultural product). These developments caused the real value of egg output to decline by -3.9%.

Finally, the collection of **milk**, the main agricultural product in the European Union (which accounted for 18.0% of the final agricultural output of EUR 12 in "1993"), was practically unchanged at European Union level in 1994 (-0.2%, following +0.2% in 1993). Nevertheless, this overall result, which was a consequence of the reduction of the milk herd and a rise in milk yields, stems from widely varying developments in individual countries. The volume of milk output rose in only four Member States (Ireland, France, the United Kingdom and Greece), while all the others experienced falls ranging from -0.1% to -3.5% (weather conditions in the Spring and Summer of 1994 having affected milk output in some countries). Milk quotas were maintained at their 1993 levels in most Member States.

Despite the -3% lowering of the intervention price for butter, the price of milk rose slightly in nominal terms (+0.8%) thanks to the combination of a stronger market, stable output and a reduction in intervention stocks of butter and skimmed milk. In real terms, however, prices fell on average in most countries (-1.8%), although some big increases (between +1.9% and +14.0%) were recorded in Italy, Portugal, Spain and Greece. The combined result of these changes was a -2.0% decline in the real value of milk output in the European Union.

2.3 Intermediate consumption and gross value added at market prices

The nominal value of the intermediate consumption of agriculture in the European Union is estimated to have increased slightly in 1994, with volume up by +0.6% and nominal prices by +0.3%. The rise in nominal prices was below the rate of inflation, however, and the value of intermediate consumption is therefore estimated to have fallen by -1.7% in real terms, as a result of a -2.3% decline in real prices. Changes in the price and the value for the European Union as a whole were below those observed in the course of the previous decade.

Changes in the **volume** of intermediate consumption were fairly similar between the Member States (see Table 2.7) since ten Member States recorded changes in a range between -1.9% and +1.1%, and the results of six countries were within a band of less than one percentage point. Ireland and Spain recorded big increases in their volume of intermediate consumption. Changes in the **prices** of intermediate consumption in real terms (comparisons of changes in nominal prices are not particularly useful, given the differences in national inflation rates) were within a narrow band of between -1.1% in Spain and -3.4% in Denmark .

Table 2.7 Changes in the volumes, prices, values, productivity of intermediate consumption and the "terms of trade" in the European Union and Member States, in 1994 as compared to 1993 (in %)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
Volume	0.7	-1.3	-1.9	1.1	4.2	1.3	5.7	0.6	0.3	0.1	-1.8	0.5	0.6
Nominal price	0.2	-1.8	0.3	8.0	2.3	-1.3	0.3	1.3	0.2	-1.4	3.8	0.3	0.3
Nominal value	0.9	-3.1	-1.6	9.2	6.6	-0.1	6.0	1.9	0.5	-1.3	1.9	0.8	0.9
Real price	-1.6	-3.4	-2.4	-2.4	-1.1	-2.9	-2.6	-2.0	-2.5	-3.1	-1.2	-1.8	-2.3
Real value	-0.9	-4.6	-4.3	-1.4	3.0	-1.6	3.0	-1.5	-2.2	-3.1	-3.0	-1.3	-1.7
"Productivity"	-3.7	0.2	-0.8	2.6	-5.8	-0.9	-6.5	-2.3	-1.2	-0.7	2.5	0.2	-1.5
"Terms of trade"	5.0	3.5	1.2	4.8	7.8	3.0	-0.3	0.8	-2.0	5.6	2.6	1.0	3.2

Changes in the **real value** of intermediate consumption were fairly close to the European Union average (-1.7%) in eight Member States (between -0.9% and -3.1%), although there were increases in Ireland and Spain (+3.0%) and more significant falls in Denmark and Germany (-4.6% and -4.3% respectively).

By comparing the changes in intermediate consumption with those in final output, measures of the change in the productivity of intermediate consumption (the ratio of the volumes) and the "terms of trade" for agriculture (the ratio of the nominal prices) can be obtained. Since the change in output volume in 1994 was below the long-term trend, and since intermediate consumption tends to vary only minimally, it is normal to find that the productivity of intermediate consumption should have declined.

In the same way, the **productivity of intermediate consumption** in the European Union as a whole was down by an average of -1.5%, although this figure conceals wide variations between Member States, three of which recorded steep declines (between -3.7% and -6.5%), while four others experienced improvements, albeit of a more modest order on average and in absolute terms (between +0.2% and +2.6%).

The **"terms of trade"** were much improved generally in the European Union in 1994 (+3.2% on average), the increases in ten Member States falling within a band between +0.8% (Italy) and +7.8% (Spain). The only declines were for Luxembourg (-2.0%) and Ireland (-0.3%), the Member States in which the nominal price of final output was unchanged or declined.

Animal feedingstuffs are the main component of intermediate consumption in all the Member States (accounting for 39.0% of the total for EUR 12 in "1993"). The use of feedingstuffs increased in 1994 by an average of +1.2% in volume terms, although there were declines in Denmark, Portugal, Germany, Greece and the Netherlands. The medium-term trend for the European Union is about +0.7% per annum. This increase is probably the result of lower real average prices (-4.0%, a decline partly attributable to lower prices for agricultural raw materials on the European Union and world markets as well as the fall in the dollar) and also of the notable increase in poultry output. In the European Union as a whole, the real value of the consumption of animal feedingstuffs fell by -2.8%.

The use of **fertilizers and soil improvers** (which accounted for 8.5% of the intermediate consumption of EUR 12 in "1993") rose by +1.0% in volume terms in 1994. There were considerable differences between individual Member States, with a recorded increased use of fertilizers for only three of them: Italy (+1.5%), the United Kingdom (+6.8%) and, most notably, Spain (+21.0%). These three increases, together with the unchanged level of use observed in Greece, more than compensated for the declines in the other countries. This result therefore represents an important break from the trend of the past six years and would appear to indicate a lasting change in farmers' behaviour. Nevertheless, it is difficult to draw any conclusions from these

results given their varied nature and the wider economic context in which they were obtained (the CAP reform with reductions in areas under crops, mainly in the form of set-aside). The real prices of fertilizers remained fairly stable on average (+0.6%) in the European Union as a whole, although there were some very wide variations, with changes ranging from -4.7% (Luxembourg) to +5.3% (Italy). In terms of real value, the use of fertilizers rose by +1.5% on average.

Table 2.8 Changes in the volumes, prices and values of the main components of intermediate consumption in the European Union, in 1994 as compared to 1993 (in %)

	Volume	Nominal price	Nominal value	Real price	Real value
Energy and lubricants	-0.4	-0.5	-0.9	-3.5	-4.0
Fertilizers and soil improvers	1.0	3.2	4.2	0.6	1.5
Feedingstuffs	1.2	-1.5	-0.3	-4.0	-2.8
Material, tools and repairs	-1.6	2.8	1.1	0.1	-1.5
Intermediate consumption	0.6	0.3	0.9	-2.3	-1.7

The use of **energy and lubricants** (which accounted for 11.2% of the intermediate consumption of EUR 12 in "1993"), measured in volume terms, fell slightly (-0.4%) in 1994. Changes in most Member States were close to this European Union average, which was well below the medium-term trend, with Portugal alone recording a big increase. Prices fell by -3.5% in real terms on average, and the real value of this item was down by -4.0%.

Purchases of **material and small tools and maintenance and repair costs** (which accounted for 13.2% of the intermediate consumption of EUR 12 in "1993") decreased by an average -1.6% in volume terms, with widely varying changes in the Member States ranging from -6.8% in Portugal to +4.9% in Ireland. Despite an average increase of +2.8% in nominal terms, prices were stable in real terms (+0.1%) and the real value of these items declined by -1.5%.

The marked increase in the nominal value of final agricultural output (+2.6%), combined with a slight increase in the nominal value of intermediate consumption (+0.9%), caused **gross value added at market prices (GVAmp)** to rise by an average of +4.2% in the European Union as a whole. In real terms, the fall in the value of intermediate consumption, at -1.7%, outweighed the -0.2% fall in final output, resulting in a net increase in GVAmp of +1.0%. It should be pointed out that this net change, which was well above the long-term trend (-1.9% per annum on average since 1980), was the result of the stabilization of output (due to a slight increase in real prices), since the change in intermediate consumption was more closely in line with the established trend.

Table 2.9 Changes in gross value added at market prices and its indices of volume and prices in the European Union and the Member States, in 1994 as compared to 1993 (in %)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
Volume	-8.4	-0.9	-3.6	4.7	-7.4	-0.5	-6.6	-2.6	-1.7	-1.2	3.8	0.9	-2.2
Nominal price	13.1	6.0	2.8	15.2	18.9	4.5	0.3	2.5	-3.3	9.6	9.8	2.7	6.5
Nominal GVAmp	3.6	5.0	-0.9	20.5	10.0	4.0	-6.4	-0.2	-5.0	8.3	13.9	3.6	4.2
Real price	11.1	4.3	0.0	4.1	14.8	2.8	-2.5	-0.9	-6.0	7.7	4.4	0.5	3.3
Real GVA mp	1.7	3.3	-3.6	8.9	6.3	2.4	-9.0	-3.5	-7.6	6.4	8.4	1.5	1.0

The development of gross value added at market prices varied considerably between Member States (see Table 2.9). These changes were basically determined by changes in final output and intermediate consumption, but also by the relative size of intermediate consumption. The share of intermediate consumption may vary from one Member State to another, depending on the main types of output and the degree of intensive production. Thus, in "1993", the share of intermediate consumption in the value of final output was below 30% in Greece and Italy, but above 50% in Belgium, Denmark, Germany, Portugal and the

United Kingdom. In the other Member States (Spain, France, Ireland, Luxembourg and the Netherlands), the share of intermediate consumption in the value of final output was between 40% and 50% (the European Union average being 46%).

In 1994, gross value added at market prices in real terms declined in only four Member States (Italy, Germany, Luxembourg and Ireland, these countries also recording the biggest falls in the real value of final agricultural output in the European Union). The eight other Member States (the United Kingdom, Belgium, France, Denmark, Spain, the Netherlands, Portugal and Greece) all recorded increases of between +1.5% and +8.9%. For these countries, GVAmp rose in real terms at a faster rate than the value of final output.

2.4 Distributive transactions

The nominal value of **operating subsidies** received by the agricultural branch of the European Union[12] increased in 1994 by +11.3% (see Table 2.10), which corresponds to a rise of +8.1% in real terms. This further increase in subsidies is basically due to the upgrading of aid in the wake of the reform of the CAP following a new fall in the intervention prices for cereals and cattle.

These figures reflect a slow-down in the trend observed over the last few years. Nevertheless, it should be stressed that the amount of subsidies taken into account in 1994 is difficult to compare with that of the years before 1993, the year when the CAP reform came into force. The sharp increase in the amount of subsidies recorded over the past two years in fact mainly reflects the change in the agriculture support system adopted in the CAP reform, whereby part of the price and market support has been replaced by direct aid. The implementation of the CAP reform has led to direct compensatory payments being given to make up for the reduction in price support and the measures designed to control output, and existing types of aid have been upgraded.

Recording subsidies and measuring agricultural income

In any analysis of the trend in agricultural incomes, the procedure used for recording subsidies needs to be defined because of their increasing importance in the composition of agricultural income (some 24% of the gross value added at market prices) and the need to ensure comparability with the agricultural income statistics of previous years.

The recording of subsidies in the Economic Accounts for Agriculture published by Eurostat is based on a payment criterion. Aid is included in the estimate of agricultural income for the **calendar year in which it is actually paid**, which does not necessarily correspond to the period in which the corresponding obligation occurred.

According to the information available, it has been estimated that on average, about 86% of aid (whether new or upgraded) in the European Union linked to the reform of the CAP and due for the 1994/1995 marketing year was actually paid out in 1994 and therefore included in the calculation of agricultural income in 1994. This proportion varies between the Member States (see Table 2.11). Nevertheless, it ranges from between 80% to 100% for all the Member States, with the exceptions of Ireland, Luxembourg, Belgium and Spain.

It should also be stressed that the estimate of agricultural income for 1994 includes aid linked to the reform of the CAP which was due for the 1993/1994 marketing year but was not paid out until 1994. Although the amounts concerned are generally lower than those of the aid paid out for the 1994/1995 marketing year, they nevertheless made a considerable difference to the trend in agricultural incomes in some Member States (such as Portugal, where they represented about 45% of the aid linked to CAP reform and paid out in 1994).

The "subsidies" heading as a whole represents widely varying developments between Member States. For example, six Member States (Luxembourg, France, the Netherlands, Belgium, Denmark and Spain) recorded increases that were above the European Union average in the range between +10% and +25%, with a further

[12] See note (7) in this chapter on the definition of subsidies in the Economic Accounts for Agriculture. The data on subsidies published in this report include estimates of the over-compensation of VAT for the countries that operate a flat-rate VAT scheme.

two countries recording rises of over +50% (Ireland and Portugal). The stabilization of subsidies in real terms that was observed in Germany and the United Kingdom resulted from the sharp reduction in certain national aids (such as socio-structural income and adjustment aids in Germany, especially in the old "Länder"). Only Greece and Italy recorded a decline, in real terms, of the amount of subsidies paid to the agricultural branch (also the result of a reduction in national aids). In view of their new importance in the composition of income, this development in subsidies had a large effect on income Indicators in the great majority of Member States.

Table 2.10 Nominal and real changes in subsidies, taxes linked to production, depreciation, rents, interest and compensation of employees in the European Union and in Member States, in 1994 as compared to 1993 (in %)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
Subsidies, nominal	18.9	22.3	3.6	9.4	27.1	15.5	58.4	-4.1	13.2	17.5	72.5	2.5	11.3
Subsidies, real	16.8	20.4	0.7	-1.2	22.8	13.6	54.0	-7.2	10.1	15.4	64.1	0.4	8.1
Taxes l.p., nominal	-26.8	-2.4	-1.8	11.0	1.9	-34.0	-24.9	1.0	0.0	-3.2	7.3	25.4	-12.1
Taxes l.p., real	-28.1	-3.9	-4.5	0.2	-1.6	-35.0	-27.0	-2.3	-2.7	-4.9	2.1	22.8	-14.6
Depreciation, nominal	3.0	0.0	1.0	12.0	10.0	0.0	2.8	4.0	1.0	1.0	10.8	0.6	2.3
Depreciation, real	1.2	-1.6	-1.7	1.2	6.2	-1.6	-0.1	0.6	-1.8	-0.8	5.4	-1.4	-0.5
Rents, nominal	3.0	0.0	6.2	8.0	10.6	0.0	0.0	-1.4	0.7	3.0	-0.3	1.9	3.9
Rents, real	1.2	-1.6	3.3	-2.4	6.9	-1.6	-2.8	-4.7	-2.0	1.2	-5.2	-0.2	1.0
Interest, nominal	2.0	1.6	-2.3	4.0	9.3	-2.2	-12.5	-21.4	-9.1	-1.5	-7.4	-10.9	-3.5
Interest, real	0.2	0.0	-5.0	-6.1	5.6	-3.7	-15.0	-23.9	-11.6	-3.2	-11.9	-12.7	-6.1
Compensation, nominal	2.0	-2.5	-	8.0	6.5	-1.3	-0.9	-3.5	3.4	-0.5	4.6	0.7	-
Compensation, real	0.2	-4.0	-	-2.4	2.9	-2.9	-3.7	-6.7	0.6	-2.3	-0.5	-1.4	-

Taxes linked to the production of agriculture in the European Union fell once more in 1994 in nominal terms (-12.1%), and even more in real terms (-14.6%). This decline stems mainly from the abolition of the co-responsibility levy on milk at the start of the 1993/1994 marketing year. This sharp reduction (close to the trend observed since the early 1990s) had only a moderate effect, however, on agricultural income because taxes linked to production represented only 3.4% of the gross value added at market prices for the European Union in "1993".

Table 2.11 Percentage of direct aid linked to the reform of the CAP and due for the 1994/1995 marketing year but which was actually paid out in 1994 and therefore taken into account in the calculation of agricultural income in 1994

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
Amount paid out in 1994 as a % of the total amount due for the 1994/1995 marketing year	73.6	100.0	84.3	90.9	73.9	91.2	65.1	80.8	71.2	87.9	100.0	89.9	86.2

National disparities are still considerable in this context, but are in some cases of little significance because of the almost negligible importance of taxes linked to production in some Member States, especially Spain, Portugal and Luxembourg. Taxes linked to production fell in all Member States except Greece, Portugal and the United Kingdom.

The balance of **"net subsidies"** (subsidies less taxes linked to production) was positive in all Member States except the Netherlands (where it declined). Denmark recorded a positive balance in 1994 whilst it had been negative up to 1992. Changes in subsidies and taxes linked to production led to an increase in **gross value added at factor cost (GVAfc)** in real terms of +2.9% (higher than that of the GVAmp which was +1.0%).

The rise in the nominal value of **depreciation** of +2.3% corresponds to a fall of -0.5% in real terms, which is less severe than the trend observed over the last few years (when the average fall was -2.0% per year in real terms) and can be explained by the increases recorded in five Member States. In particular, the increases above +5% in Spain and Portugal are worthy of note, since depreciation had slumped by about 50% over the previous three years in Spain. In the other Member States, changes were fairly close to the European Union average in real terms (between -0.1% and -1.8%).

Depreciation represented 27.3% of the gross value added at market prices in "1993". Its level had a significant impact on agricultural income since **real net value added at factor cost (NVAfc)** increased by +3.9% as against +2.9% for gross value added at factor cost. This impact, however, varied among the Member States according to the rates of change already mentioned and the relative importance of depreciation. In 1994 its influence was the same as for the European Union as a whole; in other words, it had a positive effect on income in most Member States (except Germany, Italy and Luxembourg).

Rents are generally of little significance in the European Union on average (4.6% of GVAmp in "1993"). In nominal terms, rents were an average of +3.9% higher, corresponding to an increase of +1.0% in real terms. This rise was especially due to the sharp increases observed in Spain and Germany (which together represent some 40% of all rents in the European Union in "1993"). Reductions ranging from -0.2% to -5.2% were recorded in eight Member States. Nevertheless, these changes had only a slight impact on agricultural income.

Interest payments are much more significant, since their share of GVAmp was 12.0% for EUR 12 in "1993". In 1994, interest payments declined by an average of -3.5% in nominal terms and therefore fell by -6.1% in real terms. In the wake of the increase in net value added, this new decline in interest payments contributed substantially to the rise in the income aggregate, i.e. the real total net income, which was +5.7% higher compared with +3.9% for NVAfc. This positive effect was more evident in the Member States where interest payments fell in real terms (as in Portugal) or in those where they make up a sizeable proportion of NVAfc (as in Denmark). The decline in interest payments can be explained mainly by the fall in interest rates in the European Union, but also by the reduction of the indebtedness of the agricultural branch in some Member States.

The final cost item in the calculation of agricultural incomes is the **compensation of employees**, whose share of gross value added at market prices was about 21% in the European Union (not including Germany) in "1993" (and much more in Italy and the United Kingdom), which means that it has a considerable influence on the development of Indicator 3. Since these data are not available for Germany on a comparable basis to those of other Member States, it has not been possible to calculate the change in the item "compensation of employees" for the European Union as a whole or the ensuing changes in net family income. However, for the individual Member States, the influence of the change in compensation of employees on the change in net family income can be observed and is particularly favourable towards income in Portugal, the Netherlands and Denmark (because of the low importance of the residual net family income and the decrease in compensation of employees in real terms).

Finally, it can be mentioned that for the eleven Member States of the European Union (except Germany), the costs of the compensation of employees fell slightly in nominal terms (-0.7%, following a fall in the volume of non-family labour input of -1.8%), which represents a fall in real terms of -3.4%. This led to an increase in net family income of +14.6% in nominal terms (or +10.8% in real terms).

2.5 The three Indicators of agricultural income in the European Union in 1994

2.5.1 Real net value added of agriculture at factor cost, per annual work unit (Indicator 1)

Net value added at factor cost (NVAfc) rose by +7.2% in nominal terms in 1994 for the European Union as a whole, which corresponds to a lower increase in real terms (+3.9%). As already explained, this development, which is well above the long-term trend, mainly resulted from the sharp increase in the real price of crop output and the new increase in subsidies (especially direct compensatory payments) (see para. 2.4.).

Situations of course vary substantially between the Member States. For example, the real NVAfc fell in three Member States (Italy, Luxembourg and Germany, by -6.1%, -5.3% and -2.8% respectively) (see Table 2.12). With the exception of the United Kingdom and Ireland, where the rise in real NVAfc was smaller than the European Union average, all the other countries recorded an increase of between +4.5% and +21.2%.

Table 2.12 Changes in the net value added of agriculture at factor cost, and the calculation of Indicator 1 of agricultural income, in 1994 and 1993, in the European Union and the Member States (in %)

Member State	NVAfc nominal		Deflator (GDP price index)		NVAfc real		Total labour input (in AWU)		Indicator 1 (real NVAfc/AWU)	
	93/92	94/93	93/92	94/93	93/92	94/93	93/92	94/93	93/92	94/93
B	-2.3	6.4	4.4	1.8	-6.4	4.5	-2.6	-2.6	-3.9	7.3
DK	-0.2	11.0	1.7	1.6	-1.9	9.3	-0.9	-4.6	-1.1	14.6
D	-16.8	-0.1	3.9	2.8	-19.9	-2.8	-7.8	-7.0	-13.1	4.5
GR	9.3	19.0	13.6	10.7	-3.8	7.5	-2.3	-3.1	-1.5	11.0
E	20.4	14.0	4.4	3.5	15.3	10.1	-8.7	-2.8	26.2	13.3
F	-4.0	10.3	2.3	1.6	-6.2	8.5	-5.6	-3.4	-0.6	12.4
IRL	2.6	5.8	3.6	2.9	-1.0	2.8	-2.0	-5.0	1.1	8.2
I	-4.9	-2.9	4.4	3.4	-8.9	-6.1	-6.9	-1.1	-2.1	-5.1
L	0.1	-2.7	2.1	2.8	-1.9	-5.3	-2.4	-4.5	0.5	-0.8
NL	-12.7	12.4	1.6	1.8	-14.0	10.4	-1.1	-2.6	-13.1	13.3
P	-13.5	27.3	7.4	5.1	-19.5	21.2	-1.4	0.5	-18.3	20.5
UK	16.6	3.7	3.4	2.1	12.8	1.6	-0.7	-2.1	13.6	3.7
EUR 12	-0.8	7.2			-5.0	3.9	-5.2	-2.6	0.2	6.7

Calculating Indicator 1 of agricultural income involves relating the changes in real NVAfc to those of the **volume of total agricultural labour input**. The latter, expressed in AWU, declined by -2.6% in the European Union in 1994 (which is slightly lower than the trend of about -3.0% per annum observed since 1980). The reduction in labour input is fairly even throughout the European Union; only Portugal recorded an increase in the volume of total labour input (+0.5%). The most striking reductions were once more in Germany (-7.0%), where the structural adjustment process is continuing in the new "Länder", and Ireland (-5.0%). The decline observed in Italy was much lower (at -3.4% per year) than the medium-term trend. In the other Member States, the decreases range between -2.1% for the United Kingdom to -4.6% for Denmark.

For the European Union as a whole, **agricultural income as measured by Indicator 1** (real net value added at factor cost per annual work unit) is expected to have increased by +6.7% in 1994. This average change in agricultural income for the European Union as a whole results from fairly contrasting developments in the Member States. For example, whereas two Member States recorded falls (-5.1% in Italy and -0.8% in Luxembourg), the ten others had increases ranging from between +3.7% and +20.5%.

In the following four Member States, the changes in Indicator 1 were less favourable than the average for the European Union as a whole:

- **Italy** (-5.1%, after -2.1% in 1993); the new fall in the real value of agricultural output (due in particular to the decline in the volumes of certain types of crop output, i.e. olive oil, wine and cereals) was not offset by the moderate decreases in the real value of intermediate consumption and in the volume of total labour input. The reduction in the amount of subsidies and the stabilization of depreciation caused a sharper decline in net value added;
- **Luxembourg** (-0.8%, after +0.5% in 1993); the fall in the real value of milk output (a lower volume and real price) led to a decline in the real value of final agricultural output which, combined with the slight decline of the real value of intermediate consumption, could only be partly offset by the rise of subsidies and the sharp fall in the volume of total labour input;
- **United Kingdom** (+3.7%, after +13.6% in 1993); the relatively unchanged real value of final agricultural output, resulting from diverging trends in crop output (with a fall in volumes which was more than offset by an increase in real prices) and animal output (an increase in volumes counterbalanced by the fall in real prices), combined with the decline in agricultural costs were insufficient to cause any substantial increase

in income because of the relatively constant level of subsidies (mainly due to the reduction of national subsidies);

- **Germany** (+4.5%, after -13.1% in 1993); the sharp decrease in the real value of final agricultural output (especially animal output with declines in volume and real prices) and the constant level of subsidies (mainly due to the reduction of national subsidies) led to a decline in the income aggregates, which were only offset when calculating the income Indicators by the further sharp decline in the volume of total agricultural labour input.

In contrast, the change in Indicator 1 was more positive than the European Union average in the following eight Member States, and for Spain, Ireland and France it even reached a record level in 1994:

- **Belgium** (+7.3%, after -3.9% in 1993); the substantial increase in crop output prices (mainly potatoes and fresh fruit) made it possible to offset the fall in volumes of agricultural output and new decreases in the prices of animal output, so that the real value of final agricultural output was unchanged. Additionally, the sharp increase in subsidies and the slump in taxes linked to production, thus led to a sharp increase in agricultural income;
- **Ireland** (+8.2%, after +1.1% in 1993); the declines in the real value of milk and cattle output combined with the increase in the real value of intermediate consumption led to a sharp reduction in gross value added at market prices which was more than offset by the sharp rise in subsidies and the substantial decline in the volume of agricultural labour input;
- **Greece** (+11.0%, after -1.5% in 1993); the increase in the volume of certain crop products (cereals, textile crops and olive oil) combined with the moderate rise in the average real prices of agricultural output led to a much higher real value of final agricultural output; the latter caused a very marked rise in gross value added at market prices and in the income aggregates, despite a decrease in (mainly national) subsidies;
- **France** (+12.4%, after -0.6% in 1993); the stabilization of the real value of final agricultural output (mainly due to increases in the real prices of specific crop products such as potatoes, wine, sugarbeet and fresh vegetables, as well as a slight increase in volumes) combined with the fall in the real value of numerous agricultural costs and the further increase in subsidies, led to a sharp increase in the agricultural income Indicators;
- **Spain** (+13.3%, after +26.2% in 1993); the sharp rise in crop output prices and the increase in the volume and prices of animal output resulted in an increase in the real value of final agricultural output. When this is combined the rise in subsidies to the agricultural branch, and despite the increase in numerous agricultural costs, it can be seen that there was an increase in the agricultural income Indicators;
- **Netherlands** (+13.3%, after -13.1% in 1993); the sharp increase in the real prices of crop output (especially for potatoes and fresh vegetables) offset the unchanged level of output volumes and the fall in real price of animal output; the resulting rise in the real value of final agricultural output led to an increase in the income aggregates following the fall in intermediate consumption and the rise in subsidies;
- **Denmark** (+14.6%, after -1.1% in 1993); the slight fall in the real value of final output (the stagnation of volumes and the stability of real prices leading to different trends for cattle and milk on the one hand and pigs on the other) was more than offset by a decline in agricultural costs (especially intermediate consumption with animal feedingstuffs) and a sharp increase in subsidies; the income Indicators also benefited from a considerable reduction in the volume of agricultural labour input;
- **Portugal** (+20.5%, after -18.3% in 1993); the sharp rise in volumes and prices of crop output made up for the decline in the real value of animal output (especially cattle). This was reflected by a rise in the real value of final agricultural output which, combined with the fall in the value of intermediate consumption and the very substantial increase in subsidies, led to a sharp rise in the income Indicators (despite of a slightly higher volume of agricultural labour input).

2.5.2 Real net income from agricultural activity of total labour input, per annual work unit (Indicator 2)

For the European Union as a whole, the **net income of the total labour input** increased strongly in 1994, by +9.1% in nominal terms, or by +5.7% in real terms. This development in real net income is much higher than

the trend observed since 1980 (a decline of more than -2.0% per annum) and is far more marked than that of the NVAfc, which was affected above all by the sharp decline, in real terms, of interest payments, as explained above (see para. 2.4).

As in the case of NVAfc, only Luxembourg, Italy and Germany recorded negative rates of change in the real net income of total labour input (between -3.2% and -4.7%) (see Table 2.13). The increases are close to the European Union average in the United Kingdom, Ireland and Belgium (between +2.9% and +5.9%) and much more positive for all the other countries (from +9.0% to +33.1%).

Table 2.13 **Changes in the net agricultural income of total labour input and the calculation of Indicator 2 of agricultural income, in 1994 and 1993, in the European Union and the Member States (in %)**

Member State	Nominal net total income		Deflator (GDP price index)		Real net total income		Total labour input (in AWU)		Indicator 2 (real NTI/AWU)	
	93/92	94/93	93/92	94/93	93/92	94/93	93/92	94/93	93/92	94/93
B	-4.3	7.8	4.4	1.8	-8.4	5.9	-2.6	-2.6	-5.9	8.8
DK	-7.0	30.7	1.7	1.6	-8.5	28.6	-0.9	-4.6	-7.7	34.9
D	-21.9	-0.5	3.9	2.8	-24.9	-3.2	-7.8	-7.0	-18.5	4.1
GR	8.9	20.7	13.6	10.7	-4.1	9.0	-2.3	-3.1	-1.9	12.5
E	27.7	15.0	4.4	3.5	22.3	11.1	-8.7	-2.8	33.9	14.3
F	-4.3	12.5	2.3	1.6	-6.5	10.7	-5.6	-3.4	-0.9	14.6
IRL	5.2	7.7	3.6	2.9	1.6	4.6	-2.0	-5.0	3.6	10.1
I	-4.0	-0.7	4.4	3.4	-8.0	-4.0	-6.9	-1.1	-1.2	-3.0
L	-0.6	-2.0	2.1	2.8	-2.7	-4.7	-2.4	-4.5	-0.2	-0.2
NL	-16.6	17.0	1.6	1.8	-17.9	14.9	-1.1	-2.6	-17.0	18.0
P	-15.8	39.8	7.4	5.1	-21.6	33.1	-1.4	0.5	-20.5	32.3
UK	25.2	5.1	3.4	2.1	21.1	2.9	-0.7	-2.1	22.0	5.1
EUR 12	-0.1	9.1			-4.4	5.7	-5.2	-2.6	0.8	8.5

By relating these changes in real net income to those of the total labour input measured in annual work units (already commented on in para. 2.5.1 above), agricultural income Indicator 2 is obtained, an item which rose by +8.5% in 1994 for the European Union as a whole, which is slightly above the increase for Indicator 1.

The changes per Member State in 1994 are fairly close to those already commented on for Indicator 1, though they are generally more marked, as every year, and have the same mathematical sign (see footnote 8 above). There were nevertheless two exceptions in 1994: in Italy and Luxembourg, Indicator 2 (-3.0% and -0.2% respectively) declined less steeply than Indicator 1 (-5.1% and -0.8% respectively) because of the sharp decrease in real interest payments (-23.9% and -11.6% respectively). It is interesting to note that the difference between the two Indicators is particularly wide for Denmark (+34.9% as opposed to +14.6%), and this is because of the considerable weight of interest payments in agricultural income. To a lesser extent this is also the case in Portugal (+32.3% as opposed to +20.5%) because of the interest charges, for which the change is very different from that of the NVAfc (a strong decrease and a sharp increase, respectively).

2.5.3 Real net income from agricultural activity of family labour input, per annual work unit (Indicator 3)

As already indicated in paragraphs 2.1 and 2.4 above, it has not been possible to calculate the **net income of family labour input** for the European Union as a whole.

As for the other two income aggregates, the only negative changes in real terms for 1994 were recorded in Luxembourg and Italy (-5.1% and -1.7% respectively). Increases varied considerably between Member States, ranging from +4.8% to +73.0%.

Whilst the first two indicators reflect the income of all persons occupied in agriculture, Indicator 3 covers only family labour input (the holder and members of the family working on the holding), since the compensation of employees has been deducted. The family labour input, measured in AWU, fell in 1994 in all the Member States except in Italy and Portugal, where it rose by +0.2% and +2.4% respectively. Sharp declines were

observed in Germany (-5.2%), Ireland (-5.0%) and Denmark (-4.6%). The changes recorded in the other countries ranged from -1.1% in the United Kingdom to -4.1% in Spain.

If the changes in the Indicators amongst the Member States are compared, it may be observed that Indicator 3 varies more strongly than Indicator 2, the differences between countries being therefore all the more marked (from -1.9% to +81.3%). In fact, changes with the same mathematical sign but more marked than those of Indicator 2 can be seen in ten Member States (Indicator 3 has a slightly less pronounced downward trend than Indicator 2 in Italy), the differences being particularly striking in Denmark, Portugal and, to a lesser extent, the Netherlands.

Table 2.14 Changes in the net agricultural income of the family labour input and the calculation of Indicator 3 of agricultural income, in 1994 and 1993, in the European Union and the Member States (in %)

Member State	Nominal net family income		Deflator (GDP price index)		Real net family income		Family labour input (in AWU)		Indicator 3 (real NFI/AWU)	
	93/92	94/93	93/92	94/93	93/92	94/93	93/92	94/93	93/92	94/93
B	-5.4	8.6	4.4	1.8	-9.3	6.7	-3.1	-2.9	-6.5	9.8
DK	-14.0	75.8	1.7	1.6	-15.4	73.0	-1.3	-4.6	-14.3	81.3
D	-	-	3.9	2.8	-	-	-5.9	-5.2	-	-
GR	8.8	21.6	13.6	10.7	-4.2	9.8	-2.1	-2.9	-2.1	13.2
E	38.6	17.1	4.4	3.5	32.7	13.2	-8.7	-4.1	45.3	18.0
F	-6.3	16.9	2.3	1.6	-8.4	15.1	-6.5	-3.8	-2.1	19.6
IRL	5.7	8.5	3.6	2.9	2.0	5.5	-2.0	-5.0	4.1	11.0
I	-3.9	1.7	4.4	3.4	-8.0	-1.7	-6.1	0.2	-2.0	-1.9
L	-2.1	-2.5	2.1	2.8	-4.2	-5.1	-3.9	-3.4	-0.2	-1.8
NL	-25.7	26.7	1.6	1.8	-26.9	24.4	-1.9	-2.8	-25.5	28.0
P	-23.5	57.8	7.4	5.1	-28.7	50.1	1.0	2.4	-29.4	46.6
UK	40.3	7.0	3.4	2.1	35.6	4.8	-0.4	-1.1	36.2	5.9
EUR 12	-	-			-	-	-4.6	-2.1	-	-

3 Changes in agricultural income in the Member States in 1994 over 1993

3.1 Belgium

Agricultural income as measured by Indicator 1 is estimated to have increased by +7.3% in 1994. This rise in agricultural income followed four years of consecutive decline, during which income fell by about -15%. As such, agricultural income is still slightly below the level of the base year "1990". The development in 1994 was due to a combination of factors:

- a big increase in the prices of some crop output items (especially potatoes and fresh fruit), which compensated at once for lower output volumes and further falls in the price of animal output;
- a large increase in subsidies (+16.8% in real terms) and a very considerable fall in taxes linked to production (-28.1% in real terms).

Table 3.1 Changes in the main components of the income calculation for agriculture in Belgium, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**-6.7**	**15.6**	**13.5**	**7.9**	**6.0**	**39.5**	
Potatoes	-34.5	183.5	178.5	85.7	82.4	6.2	
Sugarbeet	-15.0	2.0	0.2	-13.3	-14.8	4.1	
Fresh vegetables	-1.0	2.3	0.5	1.3	-0.5	13.5	
Fresh fruit (**)	-11.6	25.6	23.4	11.1	9.1	4.3	
Final animal output	**-0.5**	**-1.0**	**-2.8**	**-1.5**	**-3.3**	**60.2**	
Cattle	0.0	-1.0	-2.8	-1.0	-2.8	19.4	
Pigs	-3.0	1.5	-0.3	-1.6	-3.3	18.6	
Milk	-2.0	-1.7	-3.4	-3.7	-5.4	13.6	
Final output	**-3.1**	**5.2**	**3.4**	**2.0**	**0.2**	**100.0**	
Intermediate consumption	**0.7**	**0.2**	**-1.6**	**0.9**	**-0.9**	**58.2**	
Gross value added at m.p.	**-8.4**	**13.1**	**11.1**	**3.6**	**1.7**	**41.8**	**100.0**
Subsidies				18.9	16.8		12.4
Taxes linked to production				-26.8	-28.1		1.7
Depreciation				3.0	1.2		19.8
Net value added at f.c.				**6.4**	**4.5**		**90.9**
Rent				3.0	1.2		4.9
Interest				2.0	0.2		17.1
Net income of total labour				**7.8**	**5.9**		**68.9**
Compensation of employees				2.0	0.2		7.9
Net income of family labour				**8.6**	**6.7**		**61.0**

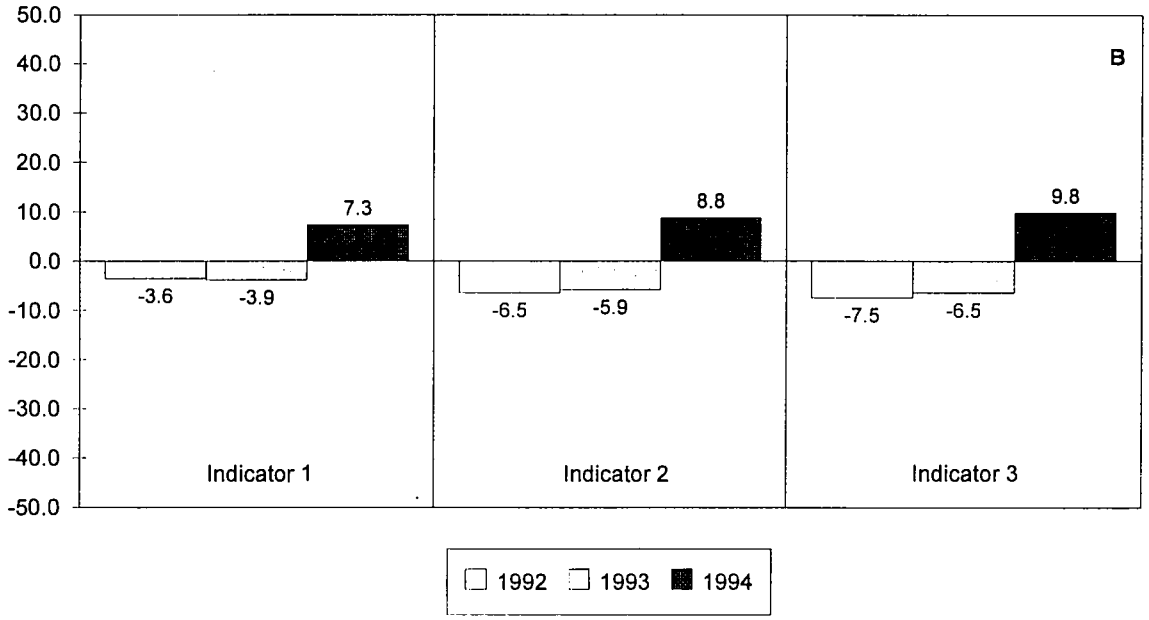
(*) The deflator is the implicit price index of GDP at market prices, +1.8%.
(**) Including citrus fruit and table grapes.

The value of final agricultural output rose by +2.0% in nominal terms and by +0.2% in real terms, given a +1.8% increase in the GDP price index. This slight increase in the real value of agricultural output was the result of a big rise (+6.0%) in the real value of crop output, that of animal output, which represents nearly two-thirds of final agricultural output, having declined by -3.3%. This new decline in the real value of animal output was due to a combination of falling real prices (-2.8%) and a slight decrease in output volume (-0.5%).

The real price of pigs, which had plummeted by -28% in 1993 as a result of the persistent imbalance of the European Union market, was more or less stable in 1994, edging downwards by just -0.3%. The volume of pig output decreased by -3.0%. The real value of cattle output fell by -2.8%. This was due to a decline in real prices (-2.8%) triggered by a further lowering of the intervention price, adopted as part of the CAP reform, and the output volume remaining stable. The volume of milk output was down by -2.0%, mainly as a result of unfavourable weather during the Summer of 1994 (high temperatures). Surplus supply on the world market and the weakness of the dollar combined to depress market prices, which fell by -3.4% in real terms. Volumes of poultry and egg output both rose strongly (+9.0% and +5.5% respectively). However, poultry prices were unchanged (0.0%) and egg prices plummeted (-19.3%).

The real price of crop output recorded a big average increase (+13.5%) - for the first time since 1989 - although output volume was down -6.7%. Although there were wide variations in the annual changes between products, the average output volume of fresh vegetables, which accounts for one-third of the value of total crop output, fell slightly (-1.0%), whereas its real price was stable (+0.5%). Despite an increase in the area devoted to potatoes, the output volume slumped (-34.5%) because of difficult climatic conditions in the summer, which adversely affected yields and their conservation. Benefiting from the lower output volume at the EU level, firm demand and the low price levels of previous recent years, the real price of potatoes soared by +178.5%. The decrease in the volume of sugarbeet output (-15.0%) can be explained by the smaller area under this crop and lower yields. The development of oilseeds and flax output appears essentially to be the result of land being transferred from hop production. The -10.0% decline in the volume of apple output, which represents nearly 50% of fresh fruit output, contributed to the decline of fresh fruit output volume (-11.6%). These falls in production were more than compensated for by a surge in real prices (+23.4%).

Graph 3.1 Evolution of the three income indicators for Belgium in 1992, 1993 and 1994 (Changes in %)



In contrast to the slight increase in the real value of final agricultural output (+0.2%), the real value of intermediate consumption was down by -0.9%. This fall was due to a decline in the real price of intermediate consumption (-1.6%), combined with an increase of +0.7% in the volume consumed. These changes resulted in a significant fall in the apparent productivity of intermediate consumption (-3.7%) and a clear increase in the "terms of trade" (+5.0%). The decrease in real prices was due essentially to declines recorded for plant protection products (-2.7%) and, most importantly, animal feedingstuffs (-3.7%). The value of the latter, which accounts for more than 40% of the value of intermediate consumption, decreased by -1.8% in real terms, despite the higher volume consumed (+2.0%, certainly the result of lower prices for raw materials and the increase in poultry production).

Subsidies rose by +16.8% in real terms. This increase was largely due to the aid paid out under the CAP reform; this was mainly the upgrading of compensatory payments following further falls in the intervention price for cereals and cattle. In this respect, it should be pointed out that only 74% of the aid linked to the CAP reform and available for 1994/1995 marketing year was actually paid in 1994 and therefore included in the estimate of agricultural income for the 1994 calendar year. Taxes linked to production again declined sharply (-28.1% in real terms), mainly as a result of the co-responsibility levy on milk being dismantled in the Spring of 1993. These changes in subsidies and in taxes linked to production led to an increase of +3.9% in gross value added at factor cost in real terms. After deducting depreciation (which increased by a relatively modest +1.2% in real terms), net value added at factor cost is obtained, which rose by +4.5% in real terms.

With rent and interest payments increasing only slightly (+1.2% and +0.2% respectively), net income from the agricultural activity of total labour rose by +5.9% in real terms. With the stabilization of the compensation of employees (+0.2% in real terms), the net income from the agricultural activity of family labour rose by +6.7% in real terms. Allowing for decreases in the volume of total labour input (-2.6%) and family labour input (-2.9%), the changes in the Indicators of agricultural income were as follows:

Indicator 1:	**+7.3%**	**(1993: -3.9%)**
Indicator 2:	**+8.8%**	**(1993: -5.9%)**
Indicator 3:	**+9.8%**	**(1993: -6.5%)**

3.2 Denmark

Agricultural income as measured by real net value added at factor cost per total AWU (Indicator 1) is expected to have risen sharply in 1994 in Denmark (+14.6%) after three years of decline (-1.1% in 1993 but particularly -10.1% in 1992 and -6.0% in 1991). The cumulative effect of the annual changes in Indicator 1 shows that the index level for 1994 is back to about the level held in "1985" and the base year of "1990".

The main reasons for the increase in Indictor 1 were:

- only a relatively small decline in the value of final output in real terms (-1.1%) which arose due to static prices for final crop and animal output in real terms (-0.2% and +0.1% respectively) together with small declines in their respective volumes (-1.8% and -0.8% respectively);
- a fall in the real value of intermediate consumption (-4.6%), which was due in particular to the decline in the value recorded for feedingstuffs (-8.1% in real terms), and
- a strong increase in real subsidies (+20.4%) and a slight fall in real terms (-1.6%) in the value recorded for depreciation in Denmark.

Table 3.2 Changes in the main components of the income calculation for agriculture in Denmark, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**-1.8**	**1.4**	**-0.2**	**-0.4**	**-2.0**	**30.2**	
Cereals	2.6	-6.6	-8.1	-4.2	-5.7	12.9	
Oilseeds	-6.7	8.9	7.2	1.7	0.1	1.4	
Flowers	-0.6	3.7	2.0	3.0	1.4	5.2	
Final animal output	**-0.8**	**1.8**	**0.1**	**0.9**	**-0.7**	**69.8**	
Cattle	-6.1	6.2	4.5	-0.3	-1.9	8.2	
Pigs	1.0	2.4	0.8	3.4	1.8	31.2	
Milk	-0.4	-0.9	-2.5	-1.0	-2.6	23.7	
Final output	**-1.1**	**1.6**	**0.0**	**0.5**	**-1.1**	**100.0**	
Intermediate consumption	**-1.3**	**-1.8**	**-3.4**	**-3.1**	**-4.6**	**53.4**	
Gross value added at m.p.	**-0.9**	**6.0**	**4.3**	**5.0**	**3.3**	**46.6**	**100.0**
Subsidies				22.3	20.4		20.7
Taxes linked to production				-2.4	-3.9		4.0
Depreciation				0.0	-1.6		29.9
Net value added at f.c.				**11.0**	**9.3**		**86.9**
Rent				0.0	-1.6		4.8
Interest				1.6	0.0		48.5
Net income of total labour				**30.7**	**28.6**		**33.5**
Compensation of employees				-2.5	-4.0		14.4
Net income of family labour				**75.8**	**73.0**		**19.1**

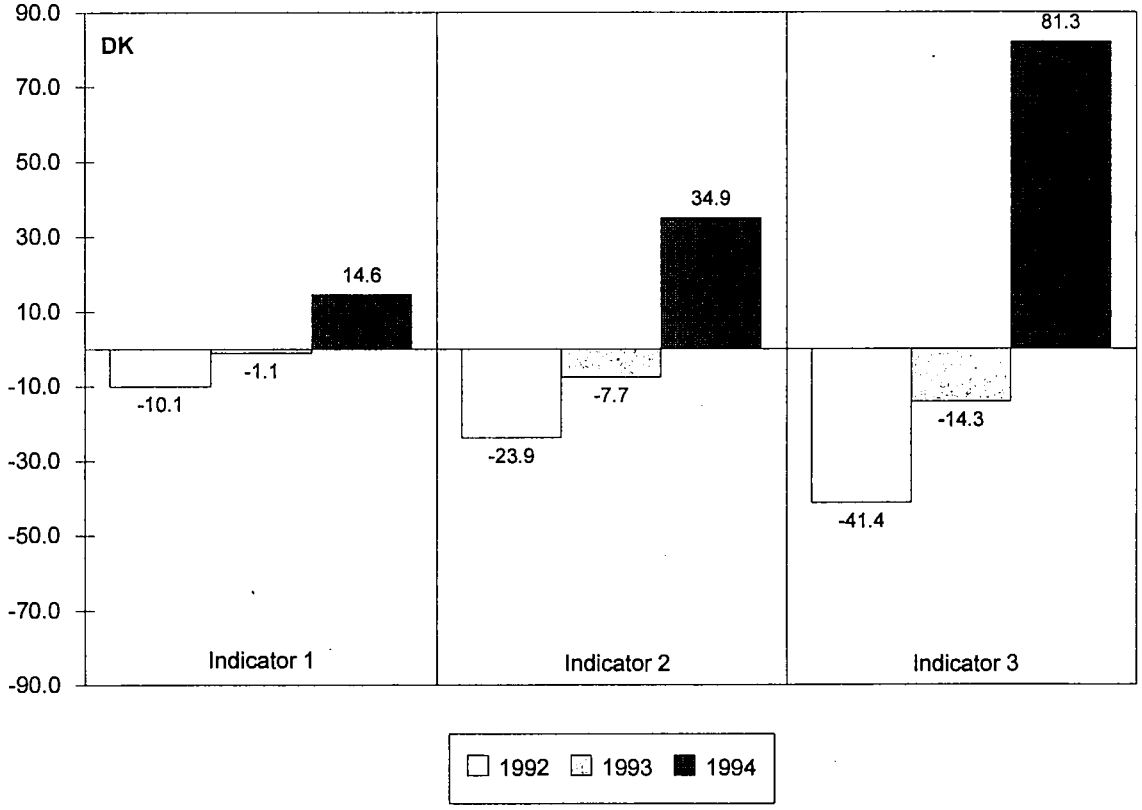
(*) The deflator is the implicit price index of GDP at market prices, + 1.6%.

The value of final output is derived from about two-thirds final animal output and one-third crop output. Farming is dominated by the output of pigs and milk, which together accounted for over half of final output in 1994 (54.9%). Therefore, the changes for these two products greatly affect the overall figure for gross value added. There was no exception in 1994 as the contrasting changes in the real values of these two products albeit cancelled each other out (+1.8% for pigs and -2.6% for milk). The real price for pigmeat in Denmark held firm (+0.8%) after prices had been sent tumbling in 1993 because of the structural imbalances apparent

in the European Union's pig sector. However, supply is still plentiful, highlighted by the small rise in output in Denmark (+1.0%). Unchanged milk production quotas were reflected in the output of milk (-0.4%) although real prices continued to decline (-2.5% in 1994). Despite the fall in institutional prices for cattle, the cyclical fall in the volume of cattle (-6.1% in Denmark) led to an increase in the real price (+4.5%).

The real value of final crop output declined by a slightly greater margin than that of final animal output (-2.0% compared to -0.7%). This was principally due to the fall in the real price of cereals (-8.1%) following further institutional price cuts in the context of CAP reforms. The volume of cereal output rose slightly (+2.6%) after substantial increases in 1993 had mirrored drought affected harvests in 1992. These patterns applied to both wheat and barley, the principal cereal crops, although the decline in the real price of wheat was a little stronger than that recorded for barley (-9.5% and -5.0% respectively).

Graph 3.2 Evolution of the three income indicators for Denmark in 1992, 1993 and 1994 (Changes in %)



The change in the value of total intermediate consumption (-4.6% in real terms) had a considerable effect on the change in the gross value added figure at market prices (+3.3% in real terms), because it represents just over half of the value of final output. The real price for feedingstuffs, an item which accounts for about half of the value of total intermediate consumption, declined by -5.5%, reflecting lower cereal prices. However, with the strong cyclical decline in cattle herd numbers in Denmark in particular, this price decline did not lead to a rise in the consumption volume of feedingstuffs (-2.8%). The decline in the consumption of fertilizers (-2.2%) and plant protection products (-5.0%) continued the trend observed in recent years. Slacker demand also led to decreases in the real prices for these two products (-3.2% and -8.7%). The real price for intermediate consumption items as a whole declined by -3.4%, with the only price rise for an individual item recorded for materials and small tools (+3.3%). After strong fluctuations in the productivity of intermediate consumption in 1992 and 1993 caused predominantly by the weather conditions, there was a return to stability in 1994 (+0.2%). Despite the continued decline in price support, the "terms of trade" improved by +3.5%, particularly because of the price developments for animal production as stated above.

In Denmark, all CAP reform subsidies are entered in their accounts as having been paid in the first calendar year of the marketing year in question. Therefore the rise of +33.4% in CAP reform subsidies[1] in real terms in the 1994/1995 marketing year has been entered into the accounts for 1994, even though this may not represent the amount actually paid out to farmers in 1994. Total subsidies increased by +20.4% in real terms and now represent about 20% of gross value added at market prices. With further decreases in the taxes linked to production (-3.9% in real terms) and more especially depreciation (-1.6% in real terms), because it accounts for about 30% of gross value added at market prices, net value added at factor cost increased considerably (+9.3% in real terms).

The particularly high share of interest payments (49%), depreciation (30%) and compensation of employees (14%) in gross value added at market prices, means that changes to gross value added at market prices and subsidies are amplified, even though percentage changes to the three items themselves may be small. This explains why there are large differences between the rates of change in Indicator 1 and Indicator 2 and then Indicator 2 and Indicator 3. In 1994, interest payments in nominal terms increased at the same rate as the GDP deflator, but the compensation of employees declined by -4.0% in real terms as there was a strong fall in hired labour. The trend in the reduction of the volume of family labour input and total labour input continued, but at an accelerated rate (-4.6% for both series, being the strongest decreases since 1988). The net result of all these factors, was that the three Income Indictors changed in the following manner for the year 1994 over 1993:

Indicator 1:	**+14.6%**	**(1993: -1.1%)**
Indicator 2:	**+34.9%**	**(1993: -7.7%)**
Indicator 3:	**+81.3%**	**(1993: -14.3%)**

3.3 Germany

For the second successive year, the figures for Germany in the Income Report relate to Germany including the new "Länder". When assessing the forecasts for 1994, it must remembered that considerable differences still exist between the agricultural branches of the former federal territory and the new "Länder" in respect of holding size distribution and types of ownership; the figures for Germany as a whole therefore cover developments which are highly dissimilar in some cases. After the severe fall in 1993, agricultural incomes in Germany are estimated to have risen slightly in 1994. The rate of change of Indicator 1 was +4.5% (1993: -13.1%) for 1994 over 1993, this being due mainly to the following factors:

- an increase in the output value of crop products by + 3.1% in real terms, as the real price level rose by the same amount;
- a decline in intermediate consumption volume of -1.9% and in real intermediate consumption prices of -2.4%;
- a slight increase in subsidies (+0.7% in real terms) with a clear fall in taxes linked to production (-4.5% in real terms);
- a further severe fall in the volume of agricultural labour input (-7.0%).

The value of final output decreased by -4.0% in real terms in 1994, as a result of falls in both output volume (-2.7%) and real prices (-1.3%). However, this conceals contrasting developments for crop output and animal output. Both the volume (-4.3%) and the real price (-4.1%) of animal output fell markedly. In contrast, the volume of crop output remained unchanged as a whole from the year before, so that the higher real price of +3.1% was fully reflected in the equally high increase in the real value of crop output.

The price increase for root crops, the value of which represents about a fifth of final crop output value, was marked (+24.3% in real terms), and particularly so in the case of potatoes (+70.8% in real terms). This increase for potatoes must be seen in conjunction with an output volume that decreased -30.9%, due to adverse climatic conditions and to reduced areas under cultivation, which in turn was probably the result of the low potato prices of previous years. The output volume of sugarbeet also declined (-15.3%), mainly

1 Denmark does not include male bovine premiums in this figure.

because of the unfavourable weather conditions, and with real prices remaining virtually constant (+0.2%), the decline in volume was almost completely reflected in the lower real production value (-15.2% in real terms). As a whole, there was a decline of -2.3% in the real production value of root crops.

Approximately one quarter of crop output value is accounted for by cereals, the real output value of which declined by -5.2%, as a result of a fall in the average price (-7.7% in real terms) that was only partly offset by a higher output volume (+2.7%), which stemmed mainly from a far better harvest in the new "Länder". In the case of fresh fruit, the combination of a higher output volume (+3.8%) and an increase in the real price (+4.2%) led to somewhat of a recovery in the real value of output (+8.2% as compared with a decline of -38.9% in 1993). Due to the unfavourable weather conditions and a slight reduction in the area under cultivation, the output volume of fresh vegetables fell by -4.8% but as the real price level rose by +14.0% in the same time, the value of output rose by +8.6% in real terms. The volume of wine output increased considerably (+22.5%), though this should be seen against a background of a strong decrease in the previous year (-16.8%), but the average price fell only slightly (-0.7% in real terms). As a result, the real value of wine output rose by +21.6%. The output value of oilseeds also increased, by a total of +14.3% in real terms, as a result of a higher output volume and an increase in the real price (+5.6% and +8.2% respectively).

Table 3.3 Changes in the main components of the income calculation for agriculture in Germany, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**0.0**	**6.0**	**3.1**	**6.0**	**3.1**	**40.9**	
Cereals	2.7	-5.1	-7.7	-2.5	-5.2	9.8	
Potatoes	-30.9	75.6	70.8	21.2	17.9	3.4	
Sugarbeet	-15.3	3.0	0.2	-12.8	-15.2	3.9	
Oilseeds	5.6	11.2	8.2	17.5	14.3	1.9	
Fresh fruit	3.8	7.2	4.2	11.2	8.2	5.7	
Wine	22.5	2.0	-0.7	25.0	21.6	3.6	
Final animal output	**-4.3**	**-1.4**	**-4.1**	**-5.7**	**-8.3**	**59.1**	
Cattle	-13.6	-2.1	-4.8	-15.5	-17.8	12.3	
Milk	-0.1	-3.3	-5.9	-3.4	-6.0	25.9	
Final output	**-2.7**	**1.5**	**-1.3**	**-1.3**	**-4.0**	**100.0**	
Intermediate consumption	**-1.9**	**0.3**	**-2.4**	**-1.6**	**-4.3**	**54.5**	
Gross value added at m.p.	**-3.6**	**2.8**	**0.0**	**-0.9**	**-3.6**	**45.5**	**100.0**
Subsidies				3.6	0.7		37.6
Taxes linked to production				-1.8	-4.5		4.1
Depreciation				1.0	-1.7		52.7
Net value added at f.c.				**-0.1**	**-2.8**		**80.8**
Rent				6.2	3.3		9.3
Interest				-2.3	-5.0		13.8
Net income of total labour				**-0.5**	**-3.2**		**57.7**
Compensation of employees				-	-		-
Net income of family labour				-	-		-

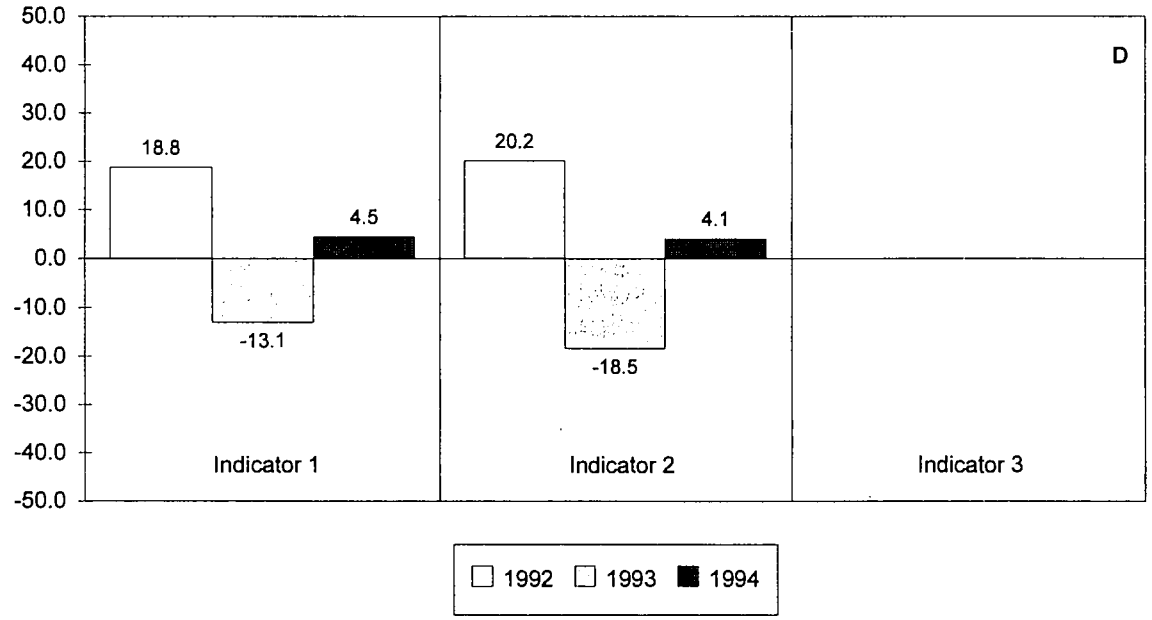
(*) The deflator is the implicit price index of gross domestic product, +2.8%.

The real value of final animal output, which accounts for about 60% of the value of final agricultural output, declined by -8.3% in real terms, following falls in both the output volume and real price. The real value of milk, which accounts for the largest share (at about 40%) of the value of final animal output, decreased by -6.0% as a result of the decline in the real price of -5.9%; the volume of milk output was nearly unchanged from the previous year (-0.1%). A further fifth of the value of final animal output is accounted for by cattle, the output volume of which fell by -13.6% as a result of lower sales and, from the middle of the year, the effect of the BSE[2] controversy. With the real price of cattle also falling (-4.8%), the value of cattle output declined considerably (-17.8% in real terms). The volume of pig output also decreased in 1994 (-4.5%), but despite prices improving considerably around the middle of the year (overall they rose by +1.7% in real terms), the real value of output also fell (-2.9%) in comparison to the previous year.

2 Bovine spongiform encephalopathy or "mad cows' disease"

With the use of intermediate consumption items falling by -1.9% in 1994, the productivity of intermediate consumption thus declined by -0.8%. The price of intermediate consumption was down by -2.4% in real terms (in nominal terms, there was a slight increase of +0.3%), with a particularly sharp decline (-7.9%) in the real price for feedingstuffs, the most important individual item in intermediate consumption. In contrast, the real prices of energy, materials and small tools and services, which together make up around half of the entire value of intermediate consumption, increased slightly (+0.4%, +0.4% and +1.7% respectively). These price changes led to the "terms of trade" improving by +1.2%. Despite the clear fall in the value of intermediate consumption items (-4.3% in real terms), when combined with the decline in the real value of final agricultural output, real gross value added at market prices decreased by -3.6%.

Graph 3.3 Evolution of the three income indicators for Germany in 1992, 1993 and 1994 (Changes in %)



Despite lower socio-structural income compensation and reduced adjustment aids, subsidies still rose slightly in real terms (+0.7%), this being due to higher aid payments in the new "Länder", since the amounts in the former federal territory fell slightly. As in the year before, about 84% of the CAP reform subsidies available for the 1994/1995 marketing year were actually paid in the calendar year 1994. Taxes linked to production declined by -4.5% in real terms. With the value of depreciation also falling (-1.7% in real terms), real net value added at factor cost declined by -2.8%.

Whereas rental payments increased by +3.3% in real terms, interest payments fell by -5.0% in real terms. The volume of total agricultural labour input is estimated to have decreased by -7.0% for 1994, with the volume of family labour input declining -5.2%. In the former federal territory, the decline in annual work units was probably greater than in previous years, whereas the reduction in the volume of labour input in the new "Länder" is likely to have slowed down. The overall trend in the Income Indicators is as follows:

Indicator 1: +4.5% (1993: -13.1%)
Indicator 2: +4.1% (1993: -18.5%)

As in 1993, no information is given on Indicator 3, since the distinction between family and non-family labour is of little meaning because of the high proportion of holdings in the new "Länder" which have legal personality. In these holdings, the compensation of employees, which in family holdings is recorded as part of the net income from agricultural activity of the family labour input, is recorded as a non-family item. This applies, for example, to the members of co-operatives (i.e. the owners) or also to payments for management tasks where the staff in question are hired.

3.4 Greece

One of the strongest increases in agricultural income within the European Union in 1994 is estimated to have been in Greece. When measured in terms of Indicator 1, the rise in agricultural income for 1994 was estimated to have been +11.0%. However, this increase in income followed two years in which the level of Indicator 1 had fallen (-1.5% in 1993 but particularly -19.2% in 1992). Nevertheless, after the agricultural income rises for 1994, the Indicator 1 index level has returned to its base year level ("1990" = 100), and confirms the steady increase in agricultural income over the reference period as a whole (+64.5% between "1973" and "1993").

The main reasons for the increase in the level of Indicator 1, were;

- the considerably higher volume of output of some crop products (cereals, fibre plants and olive oil), with increases among the very highest in the European Union, and
- moderate rises in real prices for crop products (+2.2%) and animal products (+2.4%)

Table 3.4 Changes in major components of the income calculation for agriculture in Greece, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**5.3**	**13.2**	**2.2**	**19.2**	**7.7**	**70.7**	
Cereals	22.3	4.4	-5.7	27.8	15.4	8.3	
Fibre plants	13.6	4.8	-5.3	19.0	7.5	12.4	
Tobacco	-6.8	0.6	-9.1	-6.2	-15.3	4.3	
Fresh vegetables	1.9	16.0	4.8	18.2	6.8	12.8	
Fresh fruit (**)	-2.2	22.1	10.3	19.4	7.9	11.9	
Olive oil	17.7	21.6	9.8	43.1	29.2	9.6	
Final animal output	**-0.1**	**13.4**	**2.4**	**13.2**	**2.3**	**29.3**	
Sheep and goats	0.2	5.7	-4.5	5.9	-4.4	5.8	
Milk	1.4	26.2	14.0	27.9	15.5	12.2	
Final output	**3.7**	**13.2**	**2.3**	**17.4**	**6.0**	**100.0**	
Intermediate consumption	**1.1**	**8.0**	**-2.4**	**9.2**	**-1.4**	**25.8**	
Gross value added at m.p.	**4.7**	**15.2**	**4.1**	**20.5**	**8.9**	**74.2**	**100.0**
Subsidies				9.4	-1.2		21.4
Taxes linked to production				11.0	0.2		3.9
Depreciation				12.0	1.2		5.8
Net value added at f.c.				**19.0**	**7.5**		**111.6**
Rent				8.0	-2.4		3.8
Interest				4.0	-6.1		6.8
Net income of total labour				**20.7**	**9.0**		**101.1**
Compensation of employees				8.0	-2.4		6.1
Net income of family labour				**21.6**	**9.8**		**95.0**

(*) The deflator is the implicit price index of GDP at market prices, + 10.7 %.
(**) Including citrus fruit and grapes.

The real value of crop production increased +7.7% in 1994, after rises in both volume (+5.3%) and real prices (+2.2%). With the value of crop production accounting for about 70% of the value of final output, changes to the real value of the principal crop products had a considerable effect on the overall income result. Fresh vegetables and fibre plants are the two single most important crop products in terms of their share of final output, and the real value for both of these products increased in 1994 (+6.8% and +7.5% respectively). The real price of fresh vegetables rose by +4.8% in 1994, following cost driven price rises in particular; these covered higher labour costs as labour input from other countries was substituted by more expensive local domestic labour and the high cost of investment in the sector. Continuing the trend in the expansion of fibre plant output, there was a strong rise in the production volume[3] in 1994 (+13.6%) as fibre plant production offered attractive high income returns compared to other competitive crops. Despite this considerable rise in

[3] It should be noted that this output was affected by substantial floods in October. The losses caused by these floods have not been fully estimated yet.

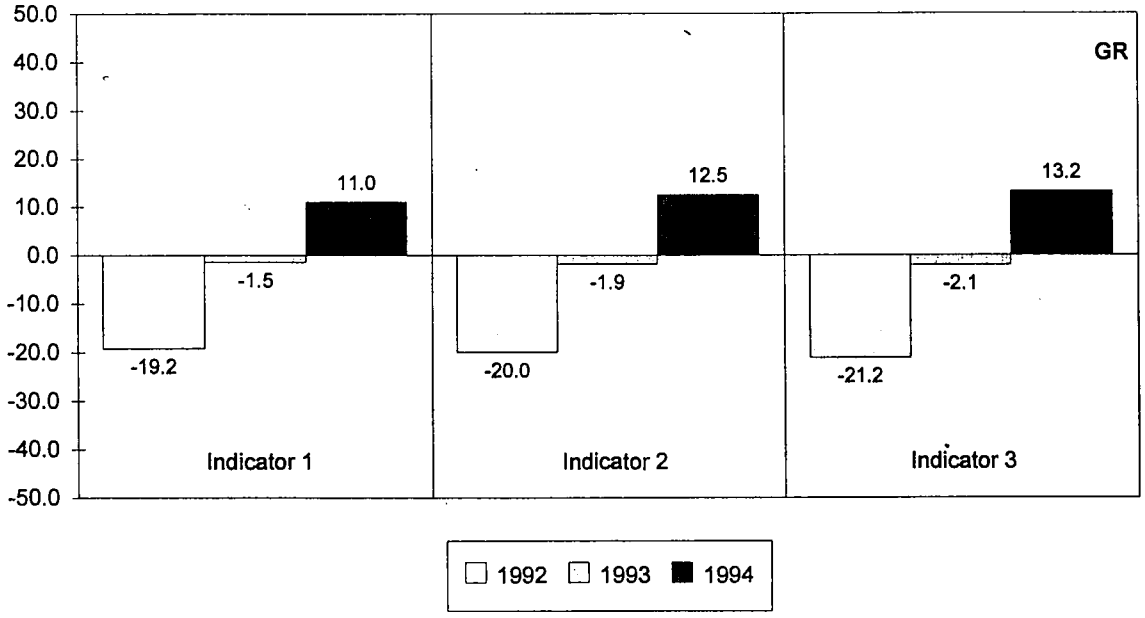
output, the real price for fibre plants declined only moderately (-5.3%) as foreign demand for Greek ginned cotton grew.

Of the main crop products, the most substantial increase in real value was recorded for olive oil (+29.2%). The production volume rose considerably (+17.7%) due to the corresponding rise in the 1994/1995 crop in line with the cyclical pattern of production as well as the fact that much of the drought-affected table olive crop was sent for olive oil. As with the other olive oil producing Member States, there was also a large increase in the real price (+9.8%) of olive oil in Greece, which reflected in part the relatively low prices in the previous two years and an increase in external demand. Another important crop product in Greece is fresh fruit and here too the real value rose (+7.9%). This resulted from a considerable price rise (+10.3%) which was in part caused by a supply shortage brought about by the substantial amount of withdrawals due to low exports, owing to the situation in the former Yugoslavia and the substantial real price rise for grapes (+26.5%) which was led by export demand.

In complete contrast to the pattern observed in other Member States, there was, like other crop products in Greece, a strong increase in the real value of cereals (+15.4% compared with an EU average of -9.0%). This rise in value was output led, because favourable weather conditions increased the per stremma yields; cereals output rose by +22.3%, of which the most significant change was for wheat (+35.6%). Despite the higher volume of cereal output and the further decline in the level of institutional prices in the context of the CAP reform, the real price of cereals decreased only by -5.7%.

The real value of animal products also increased (+2.3%) in 1994 but at a lower rate than that recorded for crop products. This average increase for the animal sector was dominated by the surge in the real price for milk (+14.0%), which resulted from stronger demand for raw milk by the dairy industry to meet export demand at a time when quotas on cow's milk had capped the domestic supply. The real value of all other animal products decreased. Cheaper imports of pigmeat from other Member States displaced domestically produced pigmeat, affecting both output (-3.1%) and real prices (-5.1%). Sheep and goat output remained stable (+0.2%) because CAP reform resulted in a restriction in the number of breeding animals and therefore births.

Graph 3.4 **Evolution of the three income indicators for Greece in 1992, 1993 and 1994 (Changes in %)**



The real value of intermediate consumption fell slightly (-1.4%) in 1994 as a small rise in the volume of intermediate consumption (+1.1%) was countered by a moderate decline in real prices (-2.4%). Energy and feedingstuffs account for over half of the value of intermediate consumption. The fall in the real value of

energy (-5.0%) was due to the decline in the real price (-7.2%), which compensated for the tax-levied affected rise in the real price in 1993. The real value of feedingstuffs decreased by -1.9%, because of similar falls in the volume and real price (-1.1% and -0.9% respectively).

Like the amended estimate for the previous year, about 90% of the subsidies due for the 1994/1995 marketing year were actually paid to farmers during 1994. However, due to the relatively high level of inflation in Greece, there was, unlike most other Member States, a small decline in the real value of subsidies (-1.2%) paid out to farmers in 1994. CAP reform subsidies for the 1994/1995 marketing year rose by +21.1% in real terms over the previous marketing year but this was slightly overbalanced by declines in the subsidies linked to crop and animal production (-7.1% and -25.8% respectively). After subsidies and taxes linked to production were considered, gross value added at factor cost increased by +7.2% in real terms.

Depreciation in real terms rose slightly (+1.2%), but the stronger increase in gross value added at factor cost, meant that the rise in net value added at factor cost was a little higher (+7.5% in real terms). The decreases in rental payments and interest payments (-2.4% and -6.1%) led, in turn, to an even greater percentage change increase in net income from agricultural activity of total labour input (+9.0%). The strong fall in the volume of non-family labour input (-5.0%) contributed to the decline in the compensation of employees (-2.4% in real terms). This led to the rise of +9.8% in real terms of net income from agricultural activity of family labour input. The continued decline in the volume of agricultural labour input (-2.9% for family labour input and -3.1% for total labour input) further improved the rise in the Income Indicators.

Indicator 1:	**+11.0%**	**(1993: -1.5%)**
Indicator 2:	**+12.5%**	**(1993: -1.9%)**
Indicator 3:	**+13.2%**	**(1993: -2.1%)**

3.5 Spain

Another clear rise in agricultural income, as measured by Indicator 1, can be expected in Spain for 1994 (+13.3%, following the +26.2% that had already been achieved in 1993). The cumulative increase in the Indicator 1 index over the base year "1990" is now estimated at +32.4%. The main reasons for the increase in 1994 were:

- a considerable rise in the real price level of final agricultural output (+6.6%), partly as a result of a lower supply but also the improved situation in agriculture overall, which led to higher domestic demand for agricultural products. There was a particularly steep rise in the price of crop output as a whole (+9.8% in real terms);
- a marked rise in the real price of milk output (+8.2%) and a higher cattle output value (+6.2% in real terms);
- a substantial increase in subsidies (+22.8% in real terms);
- a further fall in the volume of total agricultural labour input (-2.8%).

The value of final output rose by +4.7% in real terms in 1994 (after decreasing by -2.0% in the year before), due to the increase in the real price of +6.6% and a decline in the volume of agricultural output of -1.8%. A marked feature was the clear rise in the average price of crop output (+9.8% in real terms). In contrast, the volume of crop output decreased by -4.3%, partly as a consequence of CAP reform which led to a strong rise in set-aside but also meteorological conditions that were most unfavourable (the year was very dry as a whole; a mild winter was followed by late frosts in the spring and a particularly hot summer). The output volumes of cereals, sugarbeet, wine, fresh fruit and olive oil were considerably affected. However, the real value of crop output rose by +5.1%, as the fall in the volume of final crop output was rather less than the amount by which the real price had increased.

Fresh vegetables and fresh fruit together account for approximately 40% (53% when including citrus fruit, tropical fruit and table grapes) of the value of final crop output. In the case of fresh vegetables, the volume of output rose by +3.1% and this, together with the real price increase of +1.9%, resulted in the value of output rising by +5.1% in real terms. The volume of fresh fruit output was virtually constant (+0.4%). Nevertheless, when combined with the increase in the real price (+8.7%), the real value of fresh fruit output rose by +9.2%.

In contrast, the output volumes of citrus fruit, tropical fruit and table grapes fell quite considerably (-7.8%, -2.2% and -7.5% respectively). In the case of citrus fruit and table grapes, however, these falls were more than offset by huge increases in real prices (+43.6% and +35.4% respectively). This was not the case for tropical fruit, for which the real price declined by a substantial -25.4%, leading to a slump in the value of output (-27.1% in real terms). The output value of citrus fruit rose by +32.4% in real terms and that of table grapes by +25.2%.

Table 3.5 Changes in the main components of the income calculation for agriculture in Spain, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**-4.3**	**13.7**	**9.8**	**8.8**	**5.1**	**57.3**	
Cereals	-16.9	-1.3	-4.7	-18.0	-20.8	5.8	
Fresh vegetables	3.1	5.5	1.9	8.8	5.1	17.1	
Fresh fruit (**)	-3.2	24.9	20.7	20.9	16.8	13.4	
Final animal output	**1.5**	**6.4**	**2.8**	**8.0**	**4.4**	**41.3**	
Cattle	4.5	5.2	1.6	9.9	6.2	7.4	
Pigs	-2.3	7.2	3.6	4.7	1.2	11.6	
Milk	-3.5	12.0	8.2	8.1	4.4	8.7	
Final output	**-1.8**	**10.4**	**6.6**	**8.3**	**4.7**	**100.0**	
Intermediate consumption	**4.2**	**2.3**	**-1.1**	**6.6**	**3.0**	**47.7**	
Gross value added at m.p.	**-7.4**	**18.9**	**14.8**	**10.0**	**6.3**	**52.3**	**100.0**
Subsidies				27.1	22.8		31.2
Taxes linked to production				1.9	-1.6		0.9
Depreciation				10.0	6.2		8.8
Net value added at f.c.				**14.0**	**10.1**		**121.5**
Rent				10.6	6.9		6.0
Interest				9.3	5.6		15.6
Net income of total labour				**15.0**	**11.1**		**99.8**
Compensation of employees				6.5	2.9		18.9
Net income of family labour				**17.1**	**13.2**		**80.9**

(*) The deflator is the implicit price index of gross domestic product, +3.5%.

(**) Including citrus fruit, tropical fruit and table grapes.

The volume of cereal output volume decreased by -16.9% and the price level also declined, by -4.7% in real terms. Therefore, the value of cereal output, which had risen by +23.7% for the year before, declined once more, by -20.8% in real terms. The real price of olive oil rose substantially (+15.5%) but much of this was due to the decrease in the volume of output (-11.7%). As a result, the real value of olive oil output rose only by +2.0%. The severe decline in the volume of oilseeds (-19.0%) is striking, particularly as compared with the other Member States of the European Union. This fall is explained principally by the drastic reduction in the area under sunflowers of around one third, to a new level of 1.3 million hectares. However, it should be borne in mind that the area under this crop was particularly high in the year before and was reduced to counteract the sanction mechanisms of the CAP.

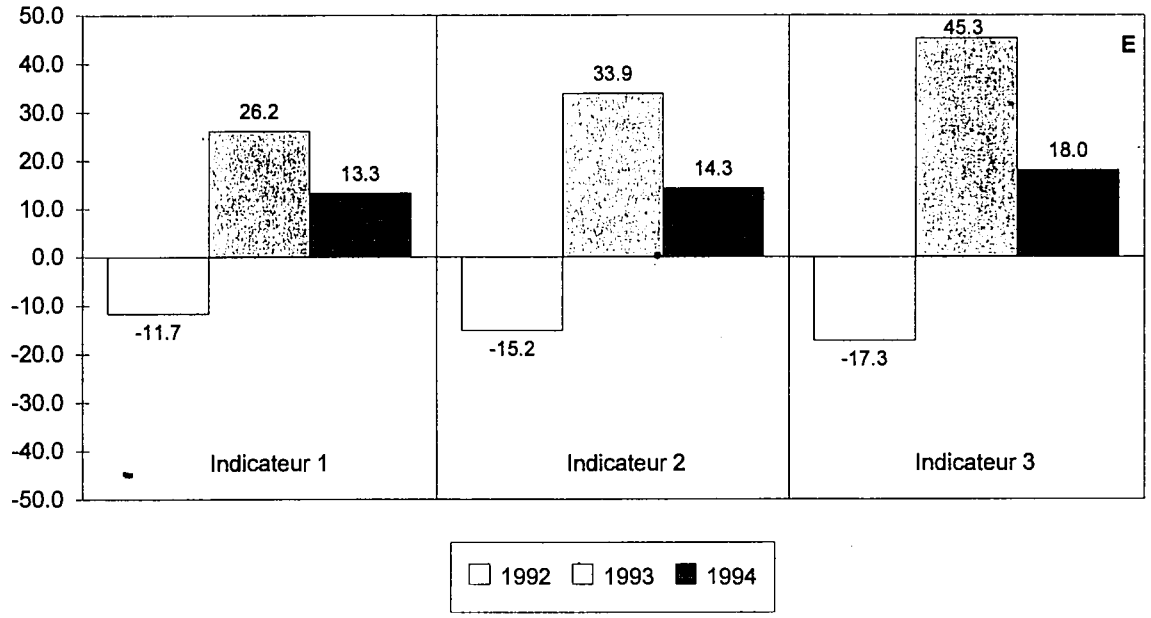
The volume of animal output, the value of which accounts for around 40% of the value of final output, rose by +1.5% in 1994. With the price level also increasing (by +2.8% in real terms), the value of final animal output was up +4.4% in real terms for 1994 (this is slightly less than that for crop output). Within the subsector of livestock, there was a further transfer of production with a decline in the volume of milk output (-3.5%) and an increase in cattle output (+4.5%), reflecting in part a consequence of the CAP reform. Nevertheless, the lower quantity of milk output was accompanied by a real price increase of +8.2%, so that output value actually rose in real terms by +4.4%. In the case of cattle, there was also an increase in the real price (+1.6%), which led to a rise in the value of output of +6.2% in real terms. Pigs represent about 30% of the value of final animal output, more than both milk (about 20%) and cattle (also about 20%). The real output value of pigs rose slightly (+1.2%) as a combined result of differing changes to the output volume (-2.3%) and real price (+3.6%). Also worthy of note is the growth in the value of sheep and goat output (+13.4% in real terms), which was derived from clear increases in both the volume of output (+7.9%) and the real price (+5.1%).

The volume of intermediate consumption items used increased by +4.2% in 1994. When compared to the lower volume of final output, it appears that the productivity of intermediate consumption fell by -5.8%. Much

greater quantities of fertilizer (+21.0%) and plant protection products (+11.2%) were consumed in 1994, though this should be seen in conjunction with the previous year's low level. The use of feedingstuffs, the value of which constitutes more than 40% of the value of intermediate consumption, rose by +3.6%. The nominal price of intermediate consumption rose by +2.3%, although, given a deflator of +3.5%, the price fell by -1.1% when expressed in real terms. In particular, the real price of energy declined considerably (-5.9%) and with that of feedingstuffs decreasing by -2.0%. The "terms of trade" improved by +7.8%, owing to the more favourable development in the nominal price of final output with regard to that of intermediate consumption. As a result of the changes outlined above, gross value added at market prices increased by +6.3%.

Following the substantial rise in subsidies recorded for 1993 (+88.3% in real terms), there is expected to have been another sharp rise in 1994 (+22.8% in real terms). This rise is due mainly to higher payments for land set-aside and compensatory payments for crop products as well as for the breeding of cattle, sheep and goats. It should also be borne in mind that a greater proportion of the CAP reform subsidies available for the 1994/1995 marketing year were actually paid out in the calendar year 1994 (74%) than was the case for corresponding 1993/1994 marketing year (63% of these available subsidies were paid in 1993). The value of subsidies reached more than 30% of real gross value added at market prices. The value of taxes linked to production fell further in 1994 though this was limited to only -1.6% in real terms (1993: -32.0%).

Graph 3.5 Evolution of the three income indicators for Spain in 1992, 1993 and 1994 (Changes in %)



The value of depreciation is estimated to have risen by +6.2% in real terms, and the rises in rental payments (+6.9% in real terms) and interest payments (+5.6% in real terms) were of the same order of magnitude. The volume of total agricultural labour input declined again (-2.8%), with that of family labour input by a greater -4.1%. The compensation of employees rose by +2.9% in real terms. The interplay of all these developments is shown in the rates of change for the three Income Indicators:

Indicator 1:	**+13.3%**	**(1993:**	**+26.2%)**
Indicator 2:	**+14.3%**	**(1993:**	**+33.9%)**
Indicator 3:	**+18.0%**	**(1993:**	**+45.3%)**

3.6 France

Agricultural income as measured by Indicator 1 is believed to have risen by +12.4% in 1994, following a small decline in 1993 (revised figure: -0.6%). This strong increase followed a period of stagnation and meant that agricultural income per unit reached its highest level since 1973, to stand at more than 10% above the level of the base year ("1990").

This general increase in income was due to a combination of several factors:

- higher real prices for crop output of +2.0% on average (particularly potatoes, wine, sugarbeet and fresh vegetables), after the considerable decrease recorded in 1993;
- increased output volumes for fresh vegetables, fresh fruit and wine (following previous steep declines in output in the case of fresh fruit and wine);
- continued application of the CAP reform, which was reflected most notably in further price decreases in the cereals and cattle sectors, and in an upgrading of compensatory payments;
- a fall in the real value of certain charges in the agricultural branch: intermediate consumption (-1.6%), rents (-1.6%), interest (-3.7%) and the compensation of employees (-2.9%).

For the first time since 1990, the value of final agricultural output increased in nominal terms (+2.0%, which corresponds to a rise of +0.4% in real terms, given that the GDP price index was up +1.6%). After two years of successive decline, the share of crop output in final agricultural output returned above 50%, as the prices and volumes of crop output rose faster than those of animal output.

Table 3.6 Changes in the main components of the income calculation for agriculture in France, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**0.6**	**3.6**	**2.0**	**4.3**	**2.7**	**50.6**	
Cereals	-6.8	1.2	-0.5	-5.7	-7.2	13.5	
Oilseeds	27.8	-6.1	-7.6	20.0	18.1	2.2	
Fresh vegetables	2.9	4.2	2.6	7.2	5.5	7.5	
Fresh fruit (**)	18.0	-0.9	-2.5	16.9	15.1	3.9	
Wine	2.0	10.9	9.2	13.1	11.3	12.7	
Final animal output	**0.2**	**-0.4**	**-2.0**	**-0.3**	**-1.8**	**49.5**	
Cattle	-2.6	0.1	-1.5	-2.5	-4.0	14.4	
Pigs	0.3	2.0	0.4	2.3	0.7	6.4	
Milk	1.0	0.0	-1.6	1.0	-0.6	17.7	
Final output	**0.4**	**1.6**	**0.0**	**2.0**	**0.4**	**100.0**	
Intermediate consumption	**1.3**	**-1.3**	**-2.9**	**-0.1**	**-1.6**	**48.5**	
Gross value added at m.p.	**-0.5**	**4.5**	**2.8**	**4.0**	**2.4**	**51.5**	**100.0**
Subsidies				15.5	13.6		29.8
Taxes linked to production				-34.0	-35.0		3.8
Depreciation				0.0	-1.6		20.7
Net value added at f.c.				**10.3**	**8.5**		**105.3**
Rent				0.0	-1.6		6.5
Interest				-2.2	-3.7		8.6
Net income of total labour				**12.5**	**10.7**		**90.2**
Compensation of employees				-1.3	-2.9		19.3
Net income of family labour				**16.9**	**15.1**		**70.9**

(*) The deflator is the implicit price index of GDP at market prices, +1.6%.
(**) Including citrus fruit and table grapes.

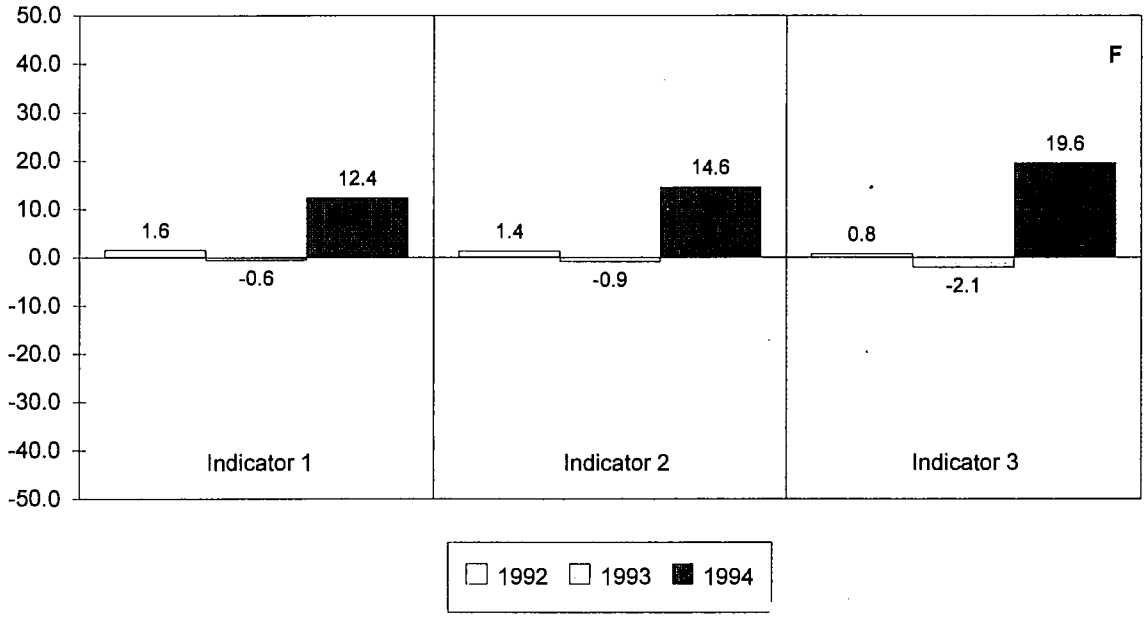
In 1994, as the second year of application, the reform of the CAP was again reflected by a decline in the area under cereals (the areas under barley and maize decreased substantially, although the area under soft wheat increased). This change benefited oilseeds (rape, sunflowers and particularly soya beans), the prices of which had become more interesting in 1993 thanks to firm demand and a strong dollar. These developments led to the output volume of cereals declining by -6.8% on the one hand, as a combined result of an increase in the output volume of wheat (+4.2%) but lower output volumes of barley (-22.9%) and maize (-18.2%), and on the other to a strong rise in the output volume of oilseeds (+27.8%). Despite a further reduction in

institutional prices agreed on as part of the CAP reform, cereal prices fell only slightly (-0.5%) in real terms, thanks to firm demand, particularly in the second half of the year.

Following the decline recorded in 1993 (-2.1%), which interrupted several years of growth, the output volume of fresh vegetables rose again in 1994 (+2.9%). However, this rise in output volume masks widely contrasting changes for individual types of fresh vegetable (increases for carrots, cauliflowers and lettuces but decreases for tomatoes and asparagus). There was also an increase in real prices (+2.6%). The output volume of fresh fruit[4] rose strongly in 1994 (+18.0%), rebounding from the steep decrease recorded in 1993 and benefiting from more favourable climatic conditions. Inversely, following a big increase in 1993, the price of fresh fruit output fell slightly (-2.5% in real terms) .

The real value of potato output increased significantly (+44.3%), due mainly to a big rise in real prices (+53.0%). The latter benefited from the lower output volumes recorded in certain European countries (Belgium, Germany, Italy), from firm demand and from the low price levels of the previous two years. Output volume contracted by -5.7% despite the larger areas under this crop. The volume of sugarbeet output fell by -10.6% because of a reduction in areas devoted to this crop and lower yields. Real prices rose by +5.2%, benefiting from the imbalance on world markets.

Graph 3.6 Evolution of the three income indicators for France in 1992, 1993 and 1994 (Changes in %)



The volume of wine output recovered somewhat in 1994 (+2.0%) from the low harvest recorded in 1993 (-10.7%). The level of table wine sales continued to decline, unlike sales of quality wines, the consumption of which benefited from falling prices over the course of the previous three years. Overall, wine prices rose by +9.2% in real terms.

The real value of cattle output declined by -4.0% in the wake of both lower real prices (-1.5%) output volume (-2.6%), which followed the considerable fall in output volume in 1993 (-7.8%). Market prices were maintained (+0.1% in nominal terms) despite a further -5% reduction in the intervention price agreed on as part of the CAP reform.

Pig output was slightly up in volume terms (+0.3%), following big rises recorded over the course of previous recent years. Although demand was supported by a big decline in prices, which favoured pigmeat to the detriment of other meats, the market for pigmeat continued to suffer from excess supply. The decline in

[4] Including citrus fruit, tropical fruit and table grapes.

deliveries during the fourth quarter and the decrease in the reproductive herd (and therefore also the production potential), helped to keep prices firm (+0.4% in real terms). Supported by a fall in the cost of feedingstuffs and by external demand, there was renewed growth in poultry output volume (+4.0%).

Milk output rose +1.0% in volume terms during 1994 as a whole, despite unfavourable climatic conditions in the Spring and Summer. Despite the fall in the intervention price for butter, the price of milk stabilized in nominal terms (0.0%), but declined by -1.6% in real terms.

The real value of intermediate consumption fell by -1.6%, as a combined result of higher volumes (+1.3%) and lower real prices (-2.9%). These changes, together with the development in final output, caused a decline in the apparent productivity of intermediate consumption (-0.9%) and an increase in the "terms of trade" (+3.0%). The change in volume, which is in sharp contrast with the trend observed since 1990, was mainly the result of increases in the use of feedingstuffs, plant protection products and purchases of seeds and plants (which together account for nearly 54% of total intermediate consumption).

The increase in the use of plant protection products (+6.0%) marks a clear break with the trend observed since 1989 (-13% over four years). In contrast, the decline in the use of fertilizers continued for the fourth year in succession (-2.5% in 1994, -24% over four years). The reason for these lower purchases may be explained by lower requirements following on from the compulsory set-aside under the CAP reform. The volume of feedingstuffs rose by +3.3%, mainly because of increased poultry production and the high level of livestock, but also because of the -3.5% decline in their real prices (linked to lower prices for raw materials).

Subsidies rose by +13.6% in real terms. This substantial rise was due to the upgrading of the compensatory aids paid under the CAP reform. This aid concerns mostly payments made out to producers of arable crops (cereals, protein plants and oilseeds) by way of compensation for lower prices and set-aside, but also concerns new or upgraded aid for cattle production. The amount of aid linked to the CAP reform, which was actually paid and accounted for in the subsidies for 1994, corresponds to 91% of the total sum available for the 1994/1995 marketing year[5]. The considerable decrease in taxes linked to production (-35.0% in real terms) was mainly due to the dismantling of the co-responsibility levy for milk (in the Spring of 1993) and the reduction of some national taxes.

The increase in real gross value added at factor cost (+6.7%), combined with a decline in depreciation (-1.6%) led to a rise in real net value added at factor cost of +8.5%. The decrease in rental payments (-1.6%) and interest payments in real terms (-3.7%, the result of lower interest rates and falling levels of debt) led to produce a +10.7% increase in real net income from agricultural activity of total labour. The fall in the compensation of employees (-2.9% in real terms, linked to a decline in the volume of hired labour) meant that real net income from agricultural activity of family labour rose even more steeply (+15.1%). In 1994, the declines in the volume of total and family labour inputs (-3.4% and -3.8% respectively), although smaller than in 1993 (-5.6% and -6.5% respectively, following measures favouring early retirement introduced in 1992), accentuated the increases in the Income Indicators:

Indicator 1:	**+12.4%**	**(1993: -0.6%)**
Indicator 2:	**+14.6%**	**(1993: -0.9%)**
Indicator 3:	**+19.6%**	**(1993: -2.1%)**

3.7 Ireland

Following the considerable rise in the level of Indicator 1 in 1992 (+19.1%) and the small one recorded in 1993 (+1.1%), income of the branch of agriculture in Ireland is expected to have increased once more in 1994 (+8.2%), to its highest level over the reference period. In the period from the early 1980s through to the base year ("1990"), the level of Indicator 1 had increased steadily. However, since the base year there has been a particularly strong rise in the level of agricultural income (+24% to 1994).

The main reasons for the increase in agricultural income in 1994 with respect to 1993 were that:

[5] In this respect, it should be underlined that some subsidies due for the marketing year 1993/1994 and which were paid only in the 1994 calendar year, have also been taken into account in the agricultural income estimate for 1994.

- the declines in the value of cattle and milk (-7.6% and -3.7% in real terms) and the rise in the real value of intermediate consumption (+3.0%) were more than compensated for by the large increase in subsidies (+54.0% in real terms), and
- there was a strong decline in the volume of family and total labour input (both -5.0%), estimated from the trend in agricultural employment.

Table 3.7 Changes in the main components of the income calculation for agriculture in Ireland, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**0.8**	**5.3**	**2.3**	**6.1**	**3.1**	**11.9**	
Cereals	-8.8	-11.2	-13.7	-19.0	-21.3	3.1	
Final animal output	**-1.5**	**-0.7**	**-3.4**	**-2.1**	**-4.9**	**88.1**	
Cattle	-3.7	-1.4	-4.1	-5.0	-7.6	37.6	
Pigs	1.0	4.7	1.8	5.8	2.8	6.3	
Sheep	-7.1	6.5	3.5	-1.1	-3.9	5.0	
Milk	0.4	-1.3	-4.1	-0.9	-3.7	33.3	
Final output	**-1.2**	**0.0**	**-2.8**	**-1.2**	**-4.0**	**100.0**	
Intermediate consumption	**5.7**	**0.3**	**-2.6**	**6.0**	**3.0**	**44.7**	
Gross value added at m.p.	**-6.6**	**0.3**	**-2.5**	**-6.4**	**-9.0**	**55.3**	**100.0**
Subsidies				58.4	54.0		35.5
Taxes linked to production				-24.9	-27.0		1.7
Depreciation				2.8	-0.1		19.0
Net value added at f.c.				**5.8**	**2.8**		**114.9**
Rent				0.0	-2.8		0.1
Interest				-12.5	-15.0		8.7
Net income of total labour				**7.7**	**4.6**		**106.1**
Compensation of employees				-0.9	-3.7		8.7
Net income of family labour				**8.5**	**5.5**		**97.4**

(*) The deflator is the implicit price index of GDP at market prices, + 2.9 %.

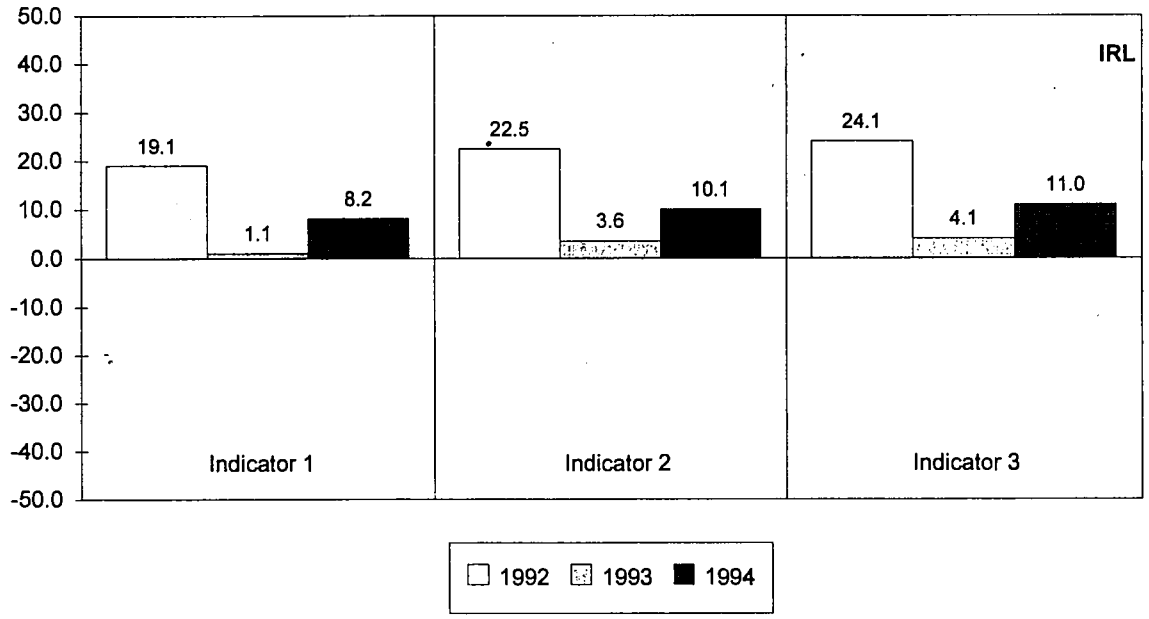
Agriculture in Ireland is dominated by the production of milk and cattle, of which the combined value of their output volume accounted for slightly over 70% of the value of final output in 1994. Although cattle herd numbers are expected to have continued to grow in 1994, output volume is estimated to have decreased by -3.7% because of short-term supply pressures, particularly for two-year old steers. Despite these short-term supply shortages, the price of the output of cattle declined (-4.1% in real terms), affected by the further -5% fall in institutional prices in July 1994 under CAP reform. The maintenance of milk quotas at their 1993 levels was reflected in the volume of milk output (+0.4%) and nominal milk prices (-1.3%), although milk prices fell by a larger margin when expressed in real terms (-4.1%). The tumble in the average price for pig output, which was so apparent in 1993 because of the structural imbalances inherent throughout the European Union, petered out in 1994 (+1.8% in real terms) despite the slight increase in output volume (+1.0%). Like cattle, there were also supply shortages in sheep production in Ireland in 1994 (the volume of output fell by -7.1%), which may be explained partly by producers changing their flock management by cutting breeding ewe numbers to take advantage of the new definition of ewes eligible for the annual ewe premium. This shortfall was reflected in the increase in prices (+3.5%). Although the value of final animal output declined by -4.9% in real terms as a result of the above factors, it still accounted for 88% of the value of final output.

In contrast to animal production, the value of crop output increased in real terms (+3.1%), but this masks several differences in the annual change in value for specific types of crop product. The value of cereals declined substantially (-21.3% in real terms) in contrast to rises for vegetables (+8.4% in real terms) and root crops (+38.8% in real terms). Reflecting a further phase of the CAP reform, there were continued reductions in the cereal area, particularly for spring wheat and winter barley, which affected the volume of output (-8.8%) and prices (-13.7% in real terms). Much of the rise in the value of root crops simply reflected the price and output volume losses in 1993.

When the results for final animal and crop output are combined they show that the real value of final output decreased by -4.0%. The change to the volume of final output (-1.2%) and the strong rise in the volume of intermediate consumption (+5.7%), implicitly caused a sharp decline in intermediate consumption productivity

(-6.5%). On the other hand, the change in the average price for intermediate consumption in nominal terms was almost as stable (+0.3%) as for final output (0.0%), so that the "price scissors" barely changed (-0.3%). Against the pattern observed in the large majority of Member States, the real value of intermediate consumption increased (+3.0%). This was mainly due to the surge in the volume of feedingstuffs consumed (+10.7%), which in part reflected demand caused by cheaper cereals prices (although the price for feedingstuffs only declined by -2.6% in real terms) and in part expanding livestock numbers. Feedingstuffs account for over 40% of the value of intermediate consumption. There was also a strong rise in the consumption of pharmaceutical products (+13.0%) but nominal prices did not rise. Continuing the trend of recent years, the value of fertilizers consumed decreased (-5.8%) as both the volume used and real prices declined (-1.8% and -4.1% respectively).

Graph 3.7 Evolution of the three income indicators for Ireland in 1992, 1993 and 1994 (Changes in %)



As a result of the decline in the real value of final output (-4.0%) and the rise in the real value of intermediate consumption (+3.0%), gross value added at market prices fell considerably (-9.0%), a decline that was the greatest recorded for any Member State (EUR 12 : +1.0%). However, after taking into account the changes for subsidies (+54.0%), which amount to a little over one-third of the value of gross value added at market prices, and taxes (-27.0%), gross value added at factor cost increased by a similar amount to the European Union average (+2.4% and +2.9% respectively). Much of the huge rise in subsidies is accounted for by CAP reform subsidies associated with livestock production. About 65% of the CAP reform subsidies, which cover compensatory payments for arable crops, support for set-aside, the young male bovine premium and the suckler cow premium, available for the 1994/1995 marketing year were paid out in the 1994 calendar year and therefore included in the income calculation. These paid subsidies represented 18% of the total subsidies paid out in 1994. With depreciation remaining unchanged from the previous year in real terms (-0.1%), net value added at factor cost increased by +2.8% in real terms.

Interest payments and the compensation of employees account for about 9% each of gross value added at market prices. The considerable decline in interest payments (-15.0% in real terms) coupled with a small decline (-2.8% in real terms) in rental payments, further assisted the increase in net income from agricultural activity of total labour input (+4.6%). The decrease in the compensation of employees (-3.7%), caused by the fall in the volume of non-family labour, likewise fostered the rise in net income from agricultural activity of family labour input (+5.5%). After including the employment trend estimate for the decline in the volume of

family and total labour input (-5.0% for both), the following rises in the Income Indicators were estimated:

Indicator 1: +8.2% (1993: +1.1%)
Indicator 2: +10.1% (1993: +3.6%)
Indicator 3: +11.0% (1993: +4.1%)

3.8 Italy

Agricultural income as measured by Indicator 1 appears to have fallen in Italy for the third year running. With a decline of -5.1% in 1994, the steepest in the European Union, Italian agricultural income expressed per unit reached its lowest level in over 15 years. This change in income was due to the following factors:

- a new decline in the real value of final agricultural output (-2.9%, especially for cereals, olive oil, wine and pigs);
- a reduction in the amount of subsidies to the agricultural branch (-7.2% in real terms);
- a moderate reduction in the volume of agricultural labour input (-1.1%).

With the exception of the year 1991, the value of Italian agricultural output has not ceased to decline in real terms for more than ten years, a trend which was confirmed by the changes recorded in 1994. The latest decline in the value of agricultural output involved both crop and animal output. Despite highly contrasting developments between products, certain trands can be identified for most of the main products.

It appears that real prices have once more fallen substantially. Although the decline was only -1.3% on average, within this there were particularly large decreases for cereals (-11.3%) and pigs (-8.4%), and to a lesser degree, fresh vegetables (-2.1%) and fresh fruit (-1.5%)[6]. The two latter items alone account for about a quarter of final agricultural output.

Table 3.8 Changes in the main components of the income calculation for agriculture in Italy, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**-3.3**	**2.4**	**-1.0**	**-1.0**	**-4.2**	**58.3**	
Cereals	-4.2	-8.2	-11.3	-12.1	-15.0	7.8	
Fresh vegetables	-1.3	1.2	-2.1	-0.1	-3.4	14.2	
Fresh fruit (**)	1.9	1.9	-1.5	3.8	0.4	11.4	
Wine	-10.5	2.5	-0.9	-8.3	-11.3	7.2	
Olive oil	-16.3	8.4	4.8	-9.3	-12.3	3.9	
Final animal output	**0.8**	**1.7**	**-1.7**	**2.5**	**-0.9**	**40.0**	
Cattle	1.7	2.6	-0.8	4.3	0.9	10.1	
Pigs	1.6	-5.3	-8.4	-3.8	-7.0	6.5	
Milk	-1.2	5.4	1.9	4.1	0.7	11.6	
Final output	**-1.7**	**2.1**	**-1.3**	**0.4**	**-2.9**	**100.0**	
Intermediate consumption	**0.6**	**1.3**	**-2.0**	**1.9**	**-1.5**	**29.4**	
Gross value added at m.p.	**-2.6**	**2.5**	**-0.9**	**-0.2**	**-3.5**	**70.6**	**100.0**
Subsidies				-4.1	-7.2		15.9
Taxes linked to production				1.0	-2.3		2.4
Depreciation				4.0	0.6		36.4
Net value added at f.c.				**-2.9**	**-6.1**		**77.1**
Rent				-1.4	-4.7		1.0
Interest				-21.4	-23.9		6.6
Net income of total labour				**-0.7**	**-4.0**		**69.5**
Compensation of employees				-3.5	-6.7		31.5
Net income of family labour				**1.7**	**-1.7**		**38.0**

(*) The deflator is the implicit price index of GDP at market prices, +3.4%.
(**) Including citrus fruit, tropical fruit and table grapes.

[1] Including citrus fruit, tropical fruit and table grapes.

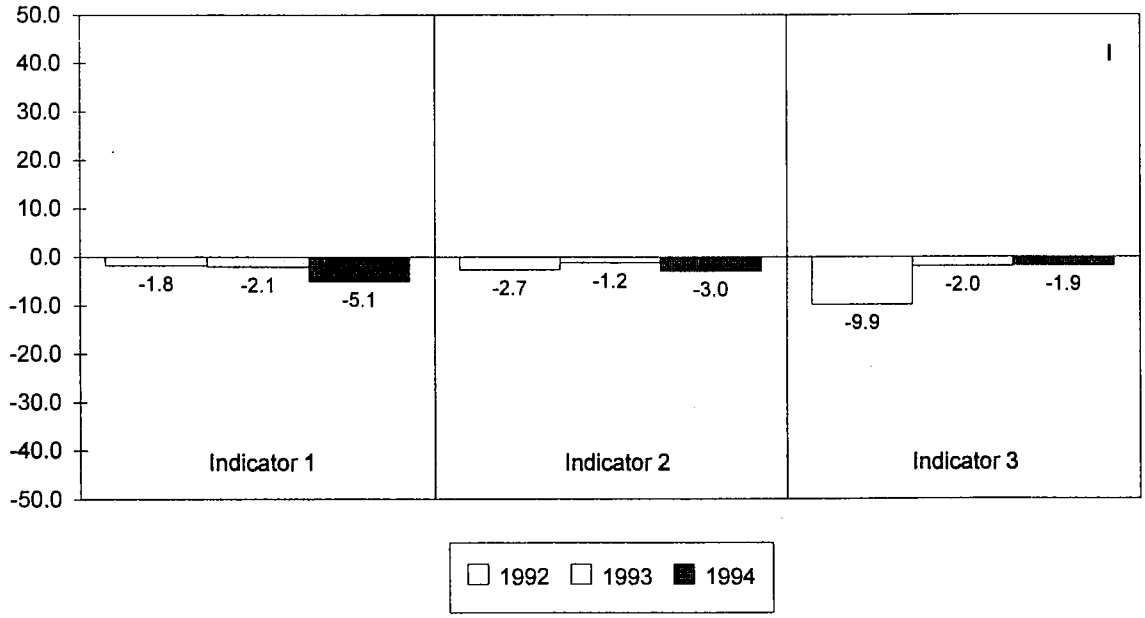
Similarly, the volume of final output fell by -1.7% on average but with, however, substantial decreases for olive oil (-16.3%), wine (-10.5%), cereals (-4.2%) and to a lesser extent fresh vegetables (-1.3%) and milk (-1.2%). There was a fall in output volume for some products for the second year running, especially wine, which had experienced already a similar decline in volume (about -20% in two years) and fresh vegetables (about -5% over two years). On the other hand, the fall in olive oil output volume followed a very steep increase recorded for 1993 (+33.3%), the product being subject to major annual fluctuations.

The declines in the real price and volume of cereals should be examined in the light of the CAP reform. In the cereals sector, this means mainly compulsory set-aside and a reduction in institutional prices. These provisions contributed to the fall in market prices for cereals as well as the decrease in their output volumes.

Final animal output, which constitutes about 40% of the value of final output, only showed moderate changes, with the real price down -1.7% and the output volume slightly up (+0.8%). The output volume of animals themselves rose by between +1.6% for pigs and +2.1% for poultry, but real prices fell by between -0.8% for cattle and -8.4% for pigs. On the other hand, there was a fall in the output volume of animal products (-0.3% for eggs and -1.2% for milk) but a rise in real prices (+1.9% for milk and +2.4% for eggs). Whilst the real price of pigs began to recover in a large number of Member States from the steep decline of 1993 caused by chronic surpluses, Italy recorded the biggest decrease in the European Union (-8.4%).

The real value of intermediate consumption, which is relatively low compared with that of other Member States (29% of final output in 1994 compared with 46% for EUR 12), fell by -1.5% as a result of the combined effect of a slight increase in volume (+0.6%) and a fall in real prices (-2.0%). Intermediate consumption as a whole, of which animal feedingstuffs make up over half, increased in volume terms. Nevertheless, these increases were very moderate (ranging from +0.2% to +1.5%). By contrast, the changes in prices were more varied, but the fall in real prices of -3.0% for animal feedingstuffs and of -9.0% for energy had a major effect on the overall trend. The result of these changes in volume and price was a decline in the apparent productivity of intermediate consumption (-2.3%) and a very slight increase in the "terms of trade" (+0.8%).

Graph 3.8 Evolution of the three income indicators for Italy in 1992, 1993 and 1994 (Changes in %)



Italy was the only Member State to have recorded a decline, in nominal terms, in subsidies to the agricultural branch. This reduction, which amounted to -7.2% in real terms, was mainly the effect of national subsidies since the aid paid in the context of the CAP reform increased once more (following further reductions in the intervention prices for cereals and cattle). On this subject, it should be noted that about 80% of aid linked to CAP reform due for the 1994/1995 marketing year was paid out in 1994 and accounted for in the agricultural

income estimate. The fall in taxes linked to production (-2.3% in real terms) combined with the decline in gross value added at market prices (-3.5% in real terms) led to a decrease in the gross value added at factor cost of -4.1%.

Depreciation, which represents more than a third of the gross value added at market prices (compared with 27% for EUR 12), increased only slightly (+0.6% in real terms). However, because of its relatively large weighting, it contributed to the decline of -6.1% in the real net value added at factor cost (the basis of indicator 1). Interest payments had a very marked decline once more (-23.9% in real terms) against a background of declining interest rates. Rents and especially the compensation of employees (following the reduction in the volume of non-family labour input of -3.7%) fell once more, by -4.7% and -6.7% respectively in real terms. The volume of family labour input, on the other hand, increased slightly (+0.2%). The Income Indicators changed as follows:

Indicator 1: -5.1% (1993: -2.1%)
Indicator 2: -3.0% (1993: -1.2%)
Indicator 3: -1.9% (1993: -2.0%).

3.9 Luxembourg

In contrast to the developments in most of the Member States of the European Union (Italy being the other exception), agricultural income as measured by Indicator 1 is expected to have declined slightly in 1994 (-0.8%). This would appear to follow slight increases in 1992 and 1993 (revised figures of +0.9% and +0.5% respectively), and means that the level of Indicator 1 is now similar to the level in attained in 1985. Since the "1990" base year, the level of Indicator 1 has fallen by a cumulative -10.6%. The main reasons for the change of Indicator 1 in 1994 were as follows:

- a fall in the price of final output (-4.4% in real terms), resulting particularly from declines for milk (-6.2% in real terms) and wine (-7.1% in real terms);
- a substantial fall in the volume of cereal output (-12.2%), together with a decline of -3.5% in the real price;
- an increase in the real value of subsidies (+10.1%);
- a further decline in the volume of agricultural labour input (-4.5%).

Table 3.9 Changes in the main components of the income calculation for agriculture in Luxembourg, % change in 1994 over 1993

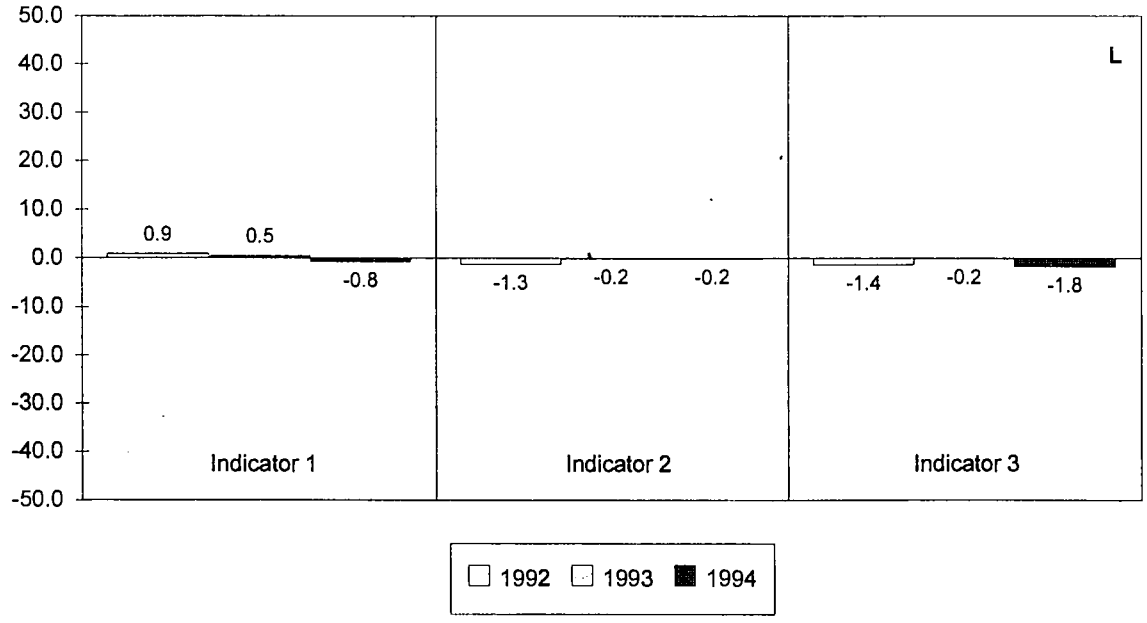
	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**0.2**	**-2.1**	**-4.8**	**-1.9**	**-4.6**	**18.7**	
Cereals	-12.2	-0.8	-3.5	-12.9	-15.3	4.5	
Wine	3.4	-4.4	-7.1	-1.2	-3.9	9.5	
Final animal output	**-1.1**	**-1.7**	**-4.4**	**-2.8**	**-5.4**	**81.0**	
Cattle	-2.1	0.7	-2.0	-1.4	-4.1	27.6	
Pigs	10.9	0.2	-2.5	11.1	8.1	8.2	
Milk	-2.6	-3.7	-6.2	-6.1	-8.7	43.5	
Final output	**-0.9**	**-1.8**	**-4.4**	**-2.6**	**-5.3**	**100.0**	
Intermediate consumption	**0.3**	**0.2**	**-2.5**	**0.5**	**-2.2**	**44.0**	
Gross value added at m.p.	**-1.7**	**-3.3**	**-6.0**	**-5.0**	**-7.6**	**56.0**	**100.0**
Subsidies				13.2	10.1		26.5
Taxes linked to production				0.0	-2.7		0.8
Depreciation				1.0	-1.8		35.6
Net value added at f.c.				**-2.7**	**-5.3**		**90.1**
Rent				0.7	-2.0		9.3
Interest				-9.1	-11.6		11.2
Net income of total labour				**-2.0**	**-4.7**		**69.6**
Compensation of employees				3.4	0.6		6.0
Net income of family labour				**-2.5**	**-5.1**		**63.6**

(*) The deflator is the implicit price index of gross domestic product, +2.8%.

The real value of final output declined by -5.3% in 1994, as a result of a slight fall in output volume (-0.9%) and a moderate decrease in the average price (-4.4% in real terms). Lower real prices affected animal and crop output to almost the same extent (the real prices were down by -4.4% and -4.8% respectively in real terms). After also considering the fall in the volume of animal output, the value of which accounts for around four-fifths of the value of final output, the value of animal output declined by -5.4% in real terms in 1994. The largest factor behind this decrease was the fall in the price of milk (-6.2% in real terms), since the value of this product accounts for as much as half of the value of the final output itself. With, additionally, a lower volume of milk output (-2.6%), the output value of milk fell quite considerably (-8.7% in real terms). The value of cattle accounts for another quarter of the value of final output. Similar developments to milk were also observed for cattle. The volume of output also declined (-2.1%) along with the real price (-2.0%), leading to a moderate decrease in the real value of output (-4.1%). The real price of pigs also fell, (-2.5%), although in this case it was more than offset by a considerable rise in output volume (+10.9%). As a result, the real value of pig output rose by +8.1%.

The decline in the value of crop output (-4.6% in real terms) was due mainly to an decreases for wine and cereals, which represent a half and a quarter of the value of final crop output respectively. In the case of wine, there was a slight increase in volume (+3.4%) but this must be seen in the light of the severe decline of -37.6% of the previous year. This rise in output volume was accompanied by a greater fall in the real price (-7.1%), so that the real value of output declined (-3.9%). In the case of cereals, there was a severe decline in output volume (-12.2%). With the real price also being lower than in 1993 (by -3.5%), the value of cereal output fell by -15.3% in real terms. A similarly large decline was recorded for the value of fresh vegetables (-16.1% in real terms) following both an output volume (-11.8%) and a price (-4.9% in real terms) that were down on the levels recorded in 1993. In fact, fresh fruit and oilseeds were the only crop products for which increases in value were recorded (+68.8% and +9.6% in real terms respectively). These rises were due to substantially higher output volumes (+81.9% and +13.6% respectively), rather than real prices (-7.2% and -3.5% respectively).

Graph 3.9 Evolution of the three income indicators for Luxembourg in 1992, 1993 and 1994 (Changes in %)



The use of intermediate consumption items rose very slightly (+0.3%). However, with the volume of final output declining, the productivity of intermediate consumption fell by -1.2%. The change in the consumption volumes of intermediate consumption, conceals widely contrasting developments for some items. On the one hand, the volume of animal feedingstuffs increased significantly (+6.3%, with a concomitant real price decline of -4.7%), and on the other the use of fertilizers fell substantially (-7.8%, despite the real price also declining

by -4.7%). With a very small increase in the nominal price of intermediate consumption (+0.2%), corresponding to a decline of -2.5% in real terms, but a fall in the nominal price of final output (-1.8%, corresponding to -4.4% in real terms), the "terms of trade" deteriorated in 1994 by -2.0%. Additionally, gross value added at market prices declined by -7.6% in real terms.

The value of subsidies rose by +10.1% in real terms, and now represents slightly more than a quarter of gross value added at market prices. The increase associated with animal output was especially large (+29.1%). The other subsidies, accounting for four-fifths of the total, rose by a smaller +5.7% in real terms. Just under three-quarters (71%) of the subsidies available for the 1994/1995 marketing year were paid out in 1994, along with the remaining third available from the 1993/1994 marketing year. The value of taxes linked to production fell by -2.7% in real terms and that of depreciation by -1.8%. These developments resulted in a decline in net value added at factor cost of -5.3% in real terms.

Rental and interest payments both fell in 1994 (by -2.0% and particularly -11.6% in real terms respectively). The volume of total agricultural labour input declined by -4.5%, with that of family labour input by -3.4%. Despite the reduction in the use of non-family labour (-12.0%, although this is based on a very small absolute figure), the compensation of employees item rose slightly (+0.6% in real terms). The following rates of change apply to the three Indicators:

Indicator 1:	**-0.8%**	**(1993: +0.5%)**
Indicator 2:	**-0.2%**	**(1993: -0.2%)**
Indicator 3:	**-1.8%**	**(1993: -0.2%)**

3.10 The Netherlands

Following severe falls in agricultural income, as measured by Indicator 1, in the previous two years (1992: -10.9%; 1993: -13.1%), an increase of +13.3% has been estimated for 1994. However, this is still -13.9% below the level of the "1990" base year. The principal factors behind the change in Indicator 1 in 1994 can be summarized as follows:

- a steep rise in the real price of crop output (+9.3%), with particularly marked increases for potatoes (+88.6% in real terms) and fresh vegetables (+13.8% in real terms);
- a decline in the value of intermediate consumption (-3.1% in real terms);
- an increase in subsidies (+15.4% in real terms) at the same time as a fall in the level of taxes linked to production (-4.9% in real terms).

The value of final output increased by +1.6% in real terms in 1994 (following a decline of -6.3% for the year before). This was due to a real price increase (+2.1%) that was slightly greater than the decline in output volume (-0.6%). The increase in the real price of final crop output was especially marked (+9.3%). The volume of final crop output remained almost stable (+0.2%), despite unfavourable weather conditions (a very dry summer and a particularly wet autumn) that stifled the yields of some products. Particularly affected were cereals and potatoes, their average yields per hectare falling by -14% and -10% respectively. Nevertheless, the value of crop output increased by +9.6% in real terms.

The combined value of fresh vegetables and potatoes accounts for more than one third of the value of final crop output. In the case of fresh vegetables, the volume of output decreased (-5.5%) following the low prices of the previous year (particularly for tomatoes). The rise in the real price in 1994 (+13.8%) should also be seen in conjunction with the fall in the year before (1993 : -11.3% in real terms). In 1994, the real value of fresh vegetable output rose by +7.5%. In a similar way, there was a particularly large increase in the real price of potatoes (+88.6%), which occurred against a background of a lower output volume (-7.5%). Nevertheless, the real value of potato output increased by a substantial +74.5%. With the volume and price developments for flowers and ornamental plants almost offsetting each other (+3.0% and -2.4% in real terms), the value of output, which accounts for a further third of final crop output value, remained virtually unchanged from the previous year's level (+0.6% in real terms). In the case of sugarbeet, the substantial decline in the volume of output (-19.0%) was only partially compensated for by a price increase (+5.1% in real terms), so that the value of output decreased by -14.8% in real terms. There was also another large fall in the value of cereal

output (-11.4% in real terms, following -12.1% in 1993), as both the volume of cereal output (-7.7%) and the real price (-4.0%) declined.

Table 3.10 Changes in the main components of the income calculation for agriculture in the Netherlands, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**0.2**	**11.3**	**9.3**	**11.5**	**9.6**	**47.4**	
Potatoes	-7.5	92.0	88.6	77.6	74.5	5.4	
Fresh vegetables	-5.5	15.8	13.8	9.5	7.5	11.4	
Flowers	3.0	-0.6	-2.4	2.4	0.6	19.7	
Final animal output	**-1.2**	**-1.7**	**-3.4**	**-2.9**	**-4.6**	**52.6**	
Cattle	1.7	-1.6	-3.3	0.0	-1.7	10.4	
Pigs	-3.0	3.8	2.0	0.7	-1.1	13.5	
Poultry	-1.5	-0.5	-2.3	-2.0	-3.7	3.7	
Milk	-1.5	-4.3	-6.0	-5.7	-7.4	21.0	
Eggs	3.0	-10.5	-12.1	-7.8	-9.5	2.9	
Final output	**-0.6**	**4.0**	**2.1**	**3.4**	**1.6**	**100.0**	
Intermediate consumption	**0.1**	**-1.4**	**-3.1**	**-1.3**	**-3.1**	**48.1**	
Gross value added at m.p.	**-1.2**	**9.6**	**7.7**	**8.3**	**6.4**	**51.9**	**100.0**
Subsidies				17.5	15.4		3.3
Taxes linked to production				-3.2	-4.9		5.4
Depreciation				1.0	-0.8		24.7
Net value added at f.c.				**12.4**	**10.4**		**73.2**
Rent				3.0	1.2		2.7
Interest				-1.5	-3.2		14.0
Net income of total labour				**17.0**	**14.9**		**56.4**
Compensation of employees				-0.5	-2.3		17.0
Net income of family labour				**26.7**	**24.4**		**39.4**

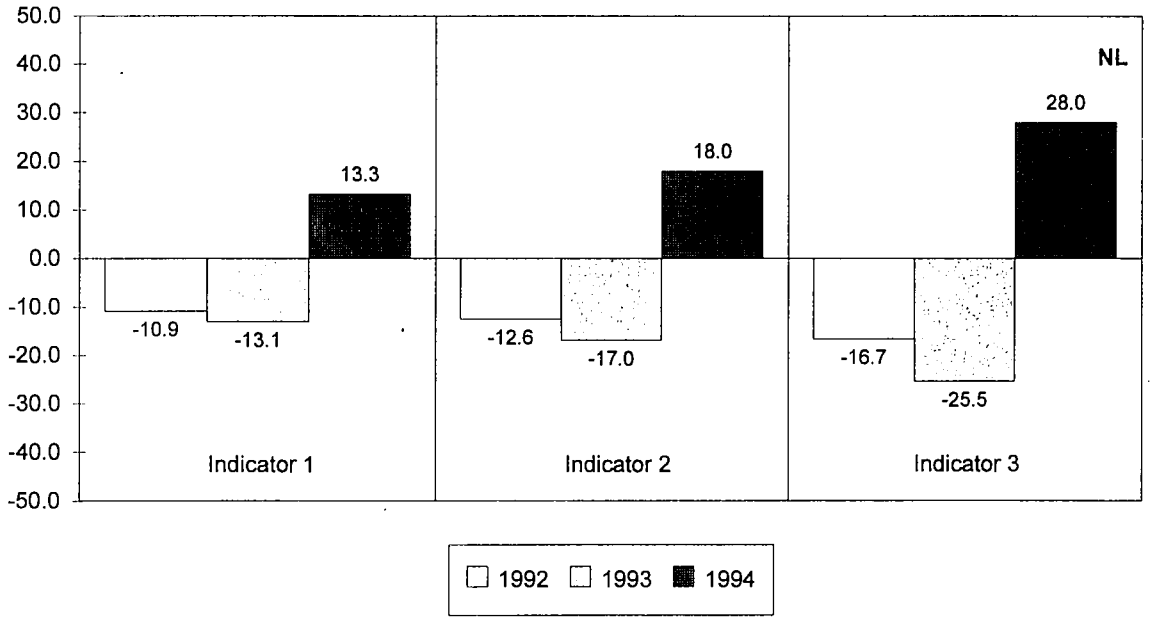
(*) The deflator is the implicit price index of gross domestic product, +1.8%.

The value of animal output, which represents just over half of the value of final output, declined by -4.6% in real terms as a result of moderate falls in the output volume (-1.2%) and the real price (-3.4%). In fact, the only increases in real prices were for pigs (+2.0%) and sheep and goats (+8.5%). In contrast, there was an above-average fall in the real price of milk (-6.0%), a product that accounts for about 40% of the value of final animal output. In this case, there was also a decline in the volume of output (-1.5%), which led to a considerable decrease in the real value of milk output (-7.4%). The low price for pigs recorded over the previous year caused the volume of output to fall by -3.0% in 1994, and although this was partly offset by a firming real price, the real value of pig output decreased slightly (-1.1%). In a reversed manner, the volume and price developments for cattle (+1.7% and -3.3% in real terms respectively) also led to the real value of cattle declining slightly (-1.7% in real terms).

The volume of intermediate consumption items used was almost constant with the level in the previous year (+0.1%). However, when compared with the lower volume of final output, the productivity of intermediate consumption decreased by -0.7%. The price level of intermediate consumption fell by -1.4% in nominal terms and by -3.1% in real terms. The main factor behind this aggregate fall was the decline of -4.4% in the real price of animal feedingstuffs, an item which accounts for almost half of the value of intermediate consumption as a whole. Additionally, the fall in the price of seed and seedlings was also very marked (-10.6% in real terms). The "terms of trade" improved by +5.6%, because of the favourable nominal price developments in final output with respect to intermediate consumption. With the value of final output increasing and the value of intermediate consumption declining, real gross value added at market prices rose by +6.4%.

Total subsidies rose by +15.4% in real terms in 1994, with a particularly large increase being recorded for subsidies linked to crop output (+30.6% in real terms). The abolition of the corresponsibility levy for milk in Spring 1993 and a decrease in the amount of superlevy, more than offset increases elsewhere in the level of taxes linked to production. As a result, taxes linked to output as a whole declined in 1994 (-4.9% in real terms, following +0.1% in 1993). Nevertheless, the level of taxes linked to production is still far above the subsidy level (the value of subsidies is around 60% of that of taxes).

Graph 3.10 Evolution of the three income indicators for the Netherlands in 1992, 1993 and 1994 (Changes in %)



The value of depreciation was -0.8% below the previous year's level in real terms. Rental payments increased by +1.2% in real terms but, in contrast, interest payments declined by -3.2% in real terms. The volume of total agricultural labour input declined by -2.6%, with that recorded for family labour input declining by marginally more (-2.8%). The was also a decline in the volume of non-family labour input which was partly reflected in the decline in the compensation of employees (-2.3% in real terms). When all of these factors are taken into account, the following rates of change apply to the three Income Indicators for 1994:

Indicator 1: +13.3% (1993: -13.1%)
Indicator 2: +18.0% (1993: -17.0%)
Indicator 3: +28.0% (1993: -25.5%)

3.11 Portugal

Agricultural income as measured by Indicator 1 appears to have increased by +20.5% in 1994. This rise, the largest in the European Union in 1994, came after three years of consecutive decline during which time agricultural income had fallen by more than -35%. However, agricultural income is still below the levels observed during the preceding decade, and is about 20% below the level of the base year "1990". The increase in 1994 was the result of a combination of the following factors:

- substantial rises in the volumes and real prices of crop output;
- a further fall in both the volume and price of intermediate consumption;
- a very considerable increase in subsidies to the agricultural branch.

For the first time since 1989, the value of final agricultural output is thought to have risen in real terms (+2.1%). Although the changes for individual products varied widely, it appears that this overall increase was mainly attributable to crop output, despite representing only about 40% of final agricultural output, since its real value increased strongly (+11.2%). In contrast, the real value of animal output declined by -3.9%, mainly because of large decreases for certain types of production (cattle, poultry, eggs).

There were larger output volumes for a number of crop products (olive oil, potatoes, cereals (including rice), fresh vegetables and tobacco), with the only decline being for fresh fruit[7] (-3.5%). There relatively similar changes for real prices, which on average rose for the first time since 1989 (+5.8%). Only the real prices of fresh vegetables and cereals declined (-9.2% and -13.9% respectively). The fall in the real price of cereals is mostly explained by a further cut in the intervention price agreed on as part of the CAP reform. The price of potatoes increased considerably because of smaller harvests in many Member States of the European Union, firm demand and the depressed price levels of the previous two years. The output volume of olive oil, which had collapsed in 1993 (-52.7%), recovered to a level more consistent with that of previous years (+38.7%).

The development of final animal output, which constitutes the most important group of products, incorporated the redress of the real value of pig output (+7.7%), which had fallen steeply in 1993 owing to major imbalances in the European Union market. Prices, which had slumped, recovered slightly in 1994 by rising +2.6% in real terms. However, output volume increased for the third year in succession (+5.0%). The further decline in the volume of cattle output (-20.0%), coming after falls in 1992 and 1993, brought the cumulative decline since 1991 to nearly -31%.

Table 3.11 Changes in the main components of the income calculation for agriculture in Portugal, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**5.1**	**11.2**	**5.8**	**16.8**	**11.2**	**42.8**	
Cereals	4.2	-9.5	-13.9	-5.8	-10.3	4.5	
Potatoes	8.3	58.1	50.4	71.1	62.8	7.2	
Fresh vegetables	1.0	-4.6	-9.2	-3.6	-8.3	10.5	
Fresh fruit (**)	-3.5	9.9	4.6	6.1	0.9	6.9	
Wine	0.0	22.7	16.7	22.7	16.7	6.1	
Final animal output	**-1.7**	**2.7**	**-2.3**	**1.0**	**-3.9**	**53.9**	
Cattle	-20.0	8.5	3.2	-13.2	-17.4	8.2	
Pigs	5.0	7.8	2.6	13.2	7.7	14.2	
Milk	-1.1	9.4	4.0	8.1	2.9	13.9	
Final output	**0.7**	**6.6**	**1.4**	**7.3**	**2.1**	**100.0**	
Intermediate consumption	**-1.8**	**3.8**	**-1.2**	**1.9**	**-3.0**	**52.7**	
Gross value added at m.p.	**3.8**	**9.8**	**4.4**	**13.9**	**8.4**	**47.3**	**100.0**
Subsidies				72.5	64.1		34.9
Taxes linked to production				7.3	2.1		0.4
Depreciation				10.8	5.4		17.2
Net value added at f.c.				**27.3**	**21.2**		**117.3**
Rent				-0.3	-5.2		2.6
Interest				-7.4	-11.9		20.5
Net income of total labour				**39.8**	**33.1**		**94.2**
Compensation of employees				4.6	-0.5		23.7
Net income of family labour				**57.8**	**50.1**		**70.5**

(*) The deflator is the implicit price index of GDP at market prices, +5.1%.

The output volume of milk was down again (-1.1%), while the real price rose strongly (+4.0%). These changes combined to give the first increase (+2.9%) in the real value of milk for more than five years. The volumes of poultry and egg output continued their steady upward trends (+2.0% and +5.0% respectively), but their real prices were well down (-13.9% and -21.0% respectively).

Despite these widely varying changes, the volume and real price of final output increased on average by +0.7% and +1.4% respectively. By contrast, the volume and real price of intermediate consumption declined by -1.8% and -1.2% respectively. This latest decline in the volume of intermediate consumption resulted from the fourth successive annual decline in the consumption of agrochemical products (plant protection products and fertilizers) at -8.4%, and a -2.6% decline in the consumption of animal feedingstuffs (the biggest single item of intermediate consumption, accounting for nearly 47% of the total). The real prices of most items of intermediate consumption fell, with the notable exception of agrochemical products, whose real prices rose

7 Including citrus fruit, tropical fruit and table grapes.

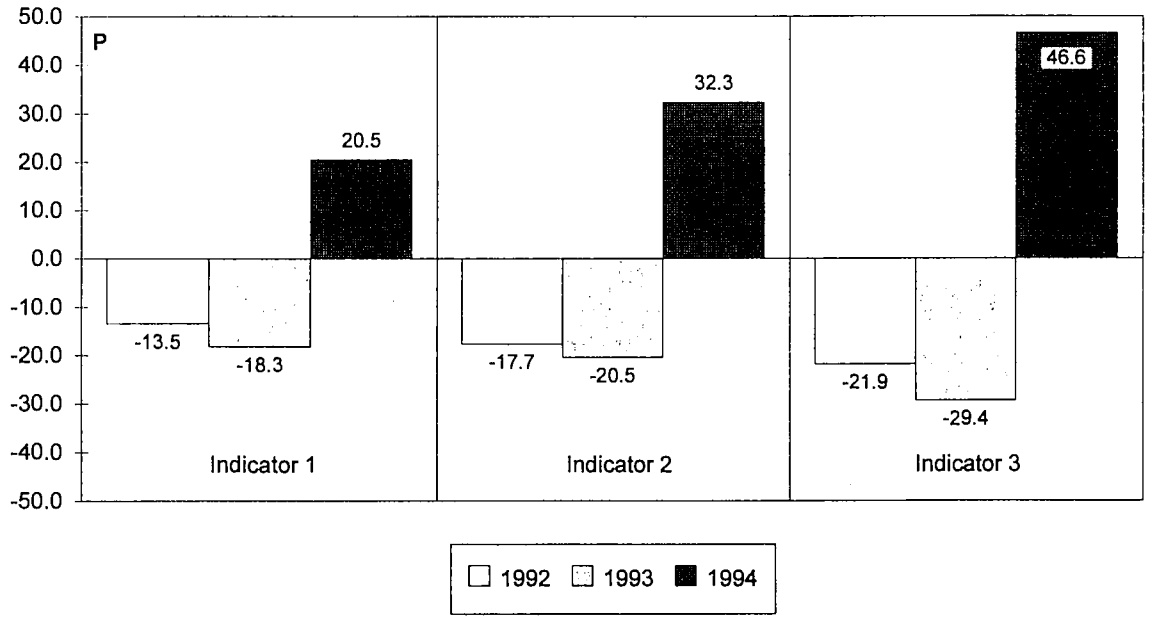
strongly (+14.4%). The net effect of these changes was a higher productivity of intermediate consumption (+2.5%) and an increase in the "terms of trade" (+2.6%).

Subsidies to the agricultural branch soared by +64.1% in real terms. This is explained by the fact that the accounts include all of the aids paid under the reform of the CAP available for the 1994/1995 marketing year, but also about 80% of these same payments available for the 1993/1994 marketing year, but which were only paid out in 1994. In effect, the estimate of agricultural income only takes account of subsidies actually paid during the calendar year. The change in agricultural income which results, does not correspond therefore only to the income arising from agricultural activities performed in the calendar year 1994.[8]

The relatively small increases in both taxes linked to production and depreciation (+2.1% and +5.4% respectively) contributed to a very substantial increase in net value added at factor cost of +21.2% in real terms. After deducting rent and interest payments, which fell again in 1994 (-5.2% and -11.9% respectively in real terms), net income from the agricultural activity of total labour is obtained, which rose by +33.1% in real terms. Including the moderate decrease in the compensation of employees (-0.5% in real terms), and the increase in the volume of the total labour input (+0.5%) and family labour input (+2.4%), leads to the following changes in the three Income Indicators:

Indicator 1: +20.5% (1993: -18.3%)
Indicator 2: +32.3% (1993: -20.5%)
Indicator 3: +46.6% (1993: -29.4%)

Graph 3.11 Evolution of the three income indicators for Portugal in 1992, 1993 and 1994 (Changes in %)



3.12 United Kingdom

For the third consecutive year, there is expected to have been an increase in agricultural income, as measured by Indicator 1, in the United Kingdom (1994: +3.7% following +13.6% and +5.6% in 1993 and 1992 respectively). The Income Indicator 1 index now shows that, after the rise of about 20% since the base year ("1990"), the level of income in the United Kingdom is back to the levels recorded for the mid-1970s.

[8] In this respect, it should be pointed out that the estimate of agricultural income in 1992 (and therefore the estimate for 1993 as well) was already distorted, since only 6% of compensatory aid related to oilseed production available for the 1992/1993 marketing year was actually paid in 1992 and included in the calculation of agricultural income for 1992. This underestimate of subsidies and of agricultural income in 1992 and 1993 has resulted in their overestimatation for 1994.

Much of the small increase in the level of Indicator 1 can be explained by the following factors:

- the unchanged value of final output in real terms (-0.1%), because both the value of animal and crop output also remained fairly unchanged (-0.7% and +0.8% in real terms respectively) in the face of the implementation of further CAP reforms;
- the constant level of total subsidies (+0.4% in real terms), which contrasts with strong increases in other Member States and large rise in subsidies in the UK the previous year, and
- a small decline in the real value of intermediate consumption (-1.3%).

Sixty percent of the value of final output is accounted for by animal output, and indeed 40% by milk and cattle alone. The stability of the value of final output was therefore largely derived from the combination of factors determining these two markets. Although the structure of the milk market was changed by the abandonment of the milk marketing board, this was late in the year (November 1st). Average output and price figures for the calendar year, show that whilst milk quotas for 1994 were kept at their 1993 levels, output volume rose slightly (+1.1%). This increase in output volume was, however, countered by a similarly small percentage fall in the real price (-0.9%). In 1993 there was a substantial fall in the output volume of cattle which was partially reflected in the increased volume estimated for 1994 (+5.9%). This higher output volume, coupled with the reduction in the carcass weight intervention price for R3 adult male bovine animals, help explain the decline in the real price of cattle output (-7.7% in real terms). Continued export demand from other Member States where there were shortages of supply, coupled with a slight reduction in the output volume of sheep (-0.7%), led to price rises (+4.7% in real terms). The real value of the output of both poultry and pigs declined by -2.8%. Despite the fact that the European Union's chronic pigmeat surplus triggered large price falls last year, there was once again a moderate rise in output volume in the UK (+2.8% in 1994). As a result prices declined (-5.5%) although not to the extent of 1993. The small percentage rise in the volume of poultry output (+0.7%) was outweighed by the decline in the average price (-3.5% in real terms).

Table 3.12 Changes in major components of the income calculation for agriculture in the United Kingdom, % change in 1994 over 1993

	Volume	Nominal price	Real price (*)	Nominal value	Real value (*)	Share of each item in % in 1994	
Final crop output	**-1.5**	**4.5**	**2.4**	**3.0**	**0.8**	**37.0**	
Cereals	1.2	-9.3	-11.2	-8.2	-10.1	13.1	
Fresh vegetables	-1.5	7.4	5.3	5.9	3.7	8.1	
Final animal output	**2.2**	**-0.7**	**-2.8**	**1.4**	**-0.7**	**63.0**	
Cattle	5.9	-5.8	-7.7	-0.2	-2.2	14.4	
Pigs	2.8	-3.5	-5.5	-0.8	-2.8	7.1	
Sheep	-0.7	6.9	4.7	6.2	4.0	5.5	
Poultry	0.7	-1.5	-3.5	-0.8	-2.8	7.2	
Milk	1.1	1.2	-0.9	2.3	0.2	23.8	
Final output	**0.7**	**1.3**	**-0.8**	**2.0**	**-0.1**	**100.0**	
Intermediate consumption	**0.5**	**0.3**	**-1.8**	**0.8**	**-1.3**	**55.6**	
Gross value added at m.p.	**0.9**	**2.7**	**0.5**	**3.6**	**1.5**	**44.4**	**100.0**
Subsidies				2.5	0.4		34.1
Taxes linked to production				25.4	22.8		1.5
Depreciation				0.6	-1.4		26.4
Net value added at f.c.				**3.7**	**1.6**		**106.1**
Rent				1.9	-0.2		2.5
Interest				-10.9	-12.7		7.2
Net income of total labour				**5.1**	**2.9**		**96.4**
Compensation of employees				0.7	-1.4		27.8
Net income of family labour				**7.0**	**4.8**		**68.6**

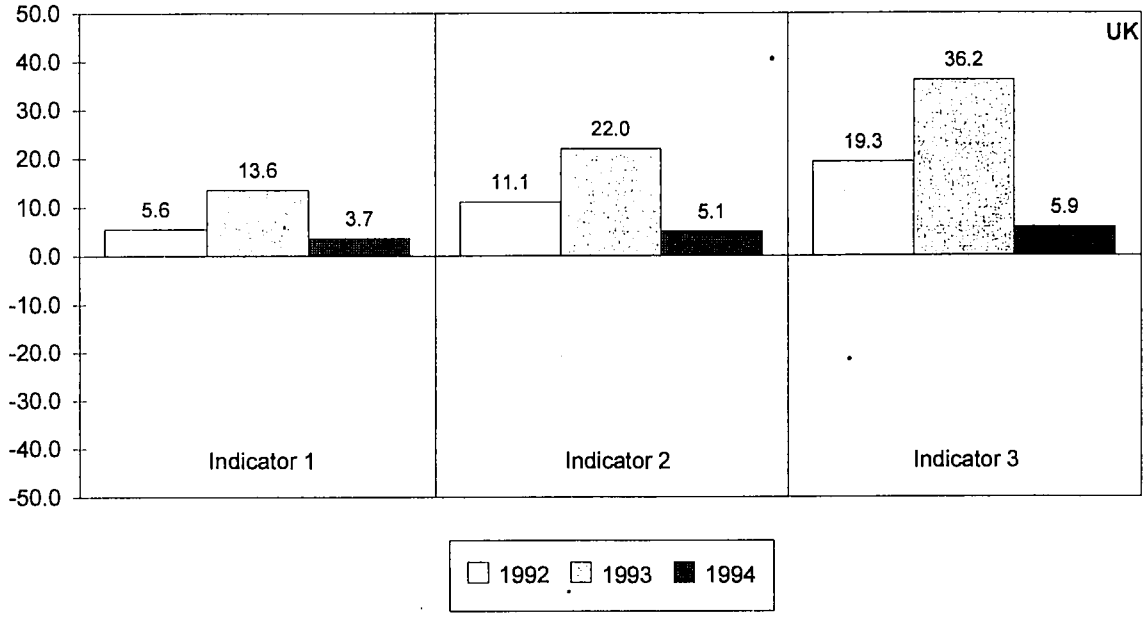
(*) The deflator is the implicit price index of GDP at market prices, + 2.1 %.

Although the real value of final crop output rose slightly (+0.8%), this masks divergent changes, even among the principal crop products. The cereals sector was once more dominated by the further implementation phase of the CAP reform, as prices declined considerably (-11.2% in real terms). The small increase in cereal output volume (+1.2%), can be explained against a background of set-aside targets having already been reached, comparable yields for almost all types of cereal in 1994 with the levels achieved in 1993 and a small

swing away from barley production into higher yielding soft wheat production. Nevertheless, the real price decrease led to a considerable decline in the value of cereal output (-10.1%), as was the case in most Member States (EUR 12 : -9.0%). In contrast to cereals, the real values of fresh vegetables (+3.7%, with the real price +5.3%) but particularly flowers and ornamental plants (+15.0%, with the real price +10.5%) and potatoes (+65.6%, with the real price of +76.6% recovering from two years of strong price falls) all increased. These rises were sufficient to balance the declines for other crop products.

There was a small decline in the value of intermediate consumption when expressed in real terms (-1.3%), following a decrease in real prices (-1.8%) that offset the smaller rise in volume (+0.5%). Much of this can be derived from the annual changes to feedingstuffs, which represent about 40% of the value of total intermediate consumption. The rise in the volume of feedingstuffs consumed (+2.1%) was mainly due to the larger UK dairy herd and the rise in male bovines of 2 years old and over. However, with the price of cereals tumbling, the price of feedingstuffs also declined (-3.5% in real terms). Other significant changes in intermediate consumption concerned the significant increase in fertilizer volume consumed (+6.8%, with the real value rising +9.2%), in contrast to significant decreases in the volumes of materials and small tools and plant protection products (-4.7% and -5.0%, with the real values of both declining by -5.1%).

Graph 3.12 Evolution of the three income indicators for the United Kingdom in 1992, 1993 and 1994 (Changes in %)



With similar changes in the volume of final output (+0.7%) and intermediate consumption (+0.5%), the productivity of intermediate consumption remained all but unchanged from 1993 (+0.2%). The change in the "price scissors" was also quite marginal (+1.0%) as the nominal price of final output increased (+1.3%) by little more than for intermediate consumption (+0.3%). Gross value added at market prices edged higher in real terms (+1.5%) following the changes in the real value of final output (-0.1%) and intermediate consumption (-1.3%).

Unlike the massive increase in subsidies recorded for 1993, subsidies for 1994 are estimated to have remained almost unchanged in the UK (+0.4% in real terms), representing about a third of the value of gross value added at market prices. Subsidies available under the reform of the CAP (covering compensatory payments for arable crops, support for set-aside, young male bovine premiums and suckler cow premiums) for the marketing year 1994/1995 and actually given out in the 1994 calendar year (and therefore recorded in the accounts for 1994) increased by between a quarter and a third in real terms over the amount paid from available CAP subsidies in the previous marketing year. However, the loss of other subsidies balanced these gains. As with the previous marketing year, about 90% of the CAP reform subsidies available for the 1994/1995 marketing year were accounted for in the 1994 calendar year. In contrast to subsidies, taxes

linked to production rose sharply (+22.8%), although they still only accounted for about 1.5% of gross value added at market prices. With depreciation declining by -1.4% when expressed in real terms, net value added at factor cost rose by +1.6%.

There was another strong decrease in interest payments (-12.7%) after the substantial decreases in 1993 when interest rates had fallen to their lowest level for twenty years. Rental payments rose in line with the GDP deflator, so that in real terms they remained almost unchanged (-0.2%). The effect of including these annual changes is reflected in the slightly greater rise in net income of total labour (+2.9%). Net income from family labour rose by a little more still, as the compensation of employees, which accounts for over a quarter of the share in gross value added at market prices, decreased in real terms (-1.4%) as the volume of non-family labour input decreased by -3.8%. When the reductions in the volume of family and total labour input are considered (-1.1% and -2.1% respectively, which are close to the long-term trend averages) along with the developments outlined above, the following changes to the Income Indicators were estimated:

Indicator 1:	**+3.7%**	**(1993: +13.6%)**
Indicator 2:	**+5.1%**	**(1993: +22.0%)**
Indicator 3:	**+5.9%**	**(1993: +36.2%)**

4 Long-term in agricultural income in the European Union for 1980 to 1994

The purpose of this chapter is to analyse the changes in agricultural income, measured in real terms, throughout the European Union over the last fifteen years, in order to identify the main trends and illustrate how the preliminary estimates of agricultural income in 1994 fit into this overall picture.

Due to the change in the territorial situation of Germany and of the European Union on 03.10.1990 and considering the availability of data on the Economic Accounts for Agriculture of the reunified Germany, the analyses here will concentrate on the reference period "1981"/"1991"[1]. Nevertheless, the recent changes that take into account the new territorial situation of the European Union will also be presented for the period "1991*"/"1994*"[2].

The chapter will first examine the salient long-term trends in agricultural income between "1981" and "1991", before describing the changes in the three Indicators of agricultural income in the European Union. There then follows an analysis of the factors determining changes in agricultural income in the period 1980-1994, against the backdrop of changes to the Common Agricultural Policy (CAP), the economic environment and the overall agricultural situation (production, markets and consumption). Finally, the components of the Income Indicators are examined in section 4.4.

4.1 Summary of main results

Agricultural income in the European Union, measured by Indicator 1, grew by an average annual +1.2%[3] between "1981" and "1991" (and by +1.0% and +0.9% per year on average when measured by Indicators 2 and 3 respectively). From "1991*" to "1994*" (i.e. with the European Union in its territorial situation after 03.10.1990), this rate of increase remained the same, with an average annual rise of +1.2% for Indicator 1 (and +1.3% per year on average for Indicator 2[4]).

This growth can be explained in the light of several factors:

- **higher agricultural productivity** thanks to technical progress and a certain intensification of agricultural production, which led to an increase in the volume of final output, averaging +1.2% per annum;
- the above contributed to an **imbalance of the agricultural markets**, characterized by a structural deterioration in the balance between supply and demand (the latter displaying very little income elasticity). This was reflected by a decline in real producer prices of an average -3.1% per year, leading to a reduction in the real value of final agricultural output of -2.0% per year on average;
- major adjustments were made to the **Common Agricultural Policy** during the course of the reference period with a view to keeping agricultural output and budgetary expenditure under control. This was first reflected principally in a restrictive price policy and, in the case of milk products, in a system of quotas, which finally resulted in a much more radical revision of the market mechanisms as part of the reform of the CAP decided in 1992 and put into operation from 1993 for a certain number of products (this essentially concerns cereals, oilseeds, protein crops and cattle).
- a slight **improvement in the "terms of trade"**[5] caused by the development of the price of intermediate consumption together with the development in the price of final output. When other cost items in the calculation of income are taken into account, real net value added at factor cost declined by -1.8% per year on average, the real net income of total labour input by an average -2.0% per year and the real net income of family labour input by -2.2% per year on average.

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1 "1981" = (1980+1981+1982)/3 and "1991" = (1990+1991+1992)/3

2 "1991*" = (1990+1991)/2 and "1994*" = (1993+1994)/2, with Germany and the European Union according to their territorial situation after 03.10.1990.

3 All averages are calculated as geometric means.

4 As a result of the particular situation of agriculture in the five new "Länder" of Germany, it has not been possible to calculate the compensation of employees item on a comparable basis to that of the other Member States. Consequently, the estimate of Indicator 3 of agricultural income for Germany and the European Union as a whole has also not been made.

5 The "terms of trade" are measured by the ratio between the price index for agricultural products and the price index for intermediate consumption, in nominal terms.

- the **decline in agricultural labour input** continued, albeit at a slower pace in the period under review (by an annual average of -3.0% for total labour input and -3.1% for family labour input) compared with the preceding two decades, giving rise to a slight increase in agricultural income when expressed per annual work unit (AWUs).

Three sub-periods in the development of incomes between "1981" and "1991" can be distinguished:

- "1981"/"1984": after falling considerably in 1979 and 1980, to their lowest level since 1975, agricultural income as measured by Indicator 1 rose by an annual average of +1.3% during the period from "1981" to "1984". The considerable rise in income of +10.4% in the year 1992 should be noted.
- "1984"/"1987": agricultural income in this following sub-period was less favourable since Indicator 1 fell slightly (averaging -0.4% per annum), with only minor fluctuations.
- "1987"/"1991": this stabilization of incomes came to an end in the sub-period "1987"/"1991". Thanks to increases in 1988 and more particularly 1989, which was an exceptional year (+11.9%), and despite a fall in 1992, income grew by an average annual +2.5%.

Between "1991*" and "1994*", the rise in agricultural income in the European Union (in its new territorial situation) slowed down slightly, with an increase of +1.2% per year on average. This was, however, only thanks to the strong rise recorded in 1994.

4.2 Presentation of long-term income trends in the European Union

Net value added at factor cost (NVAcf) in real terms, and per AWU (i.e. Income Indicator 1 of the European Union's agricultural branch) rose by an average +1.2% per year between "1981" and "1991" (see Table 4.1), which represents a cumulative growth of +13.1% over the whole of the period.

Table 4.1 The development of Indicators 1, 2 and 3 of agricultural income for the European Union, from 1980 to 1994 ("1990" = 100 with the exception of (2))

	INDICATOR 1				INDICATOR 2				INDICATOR 3			
YEAR	Index		Annual change (%)		Index		Annual change (%)		Index		Annual change (%)	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1980	83.8	:			85.8	:			84.4	:		
1981	84.7	:	1.1	:	85.5	:	-0.3	:	84.0	:	-0.5	:
1982	93.5	:	10.4	:	95.7	:	11.9	:	97.8	:	16.5	:
1983	90.3	:	-3.5	:	91.3	:	-4.6	:	91.1	:	-6.8	:
1984	92.6	:	2.6	:	93.8	:	2.7	:	95.0	:	4.3	:
1985	89.4	:	-3.5	:	89.3	:	-4.8	:	88.3	:	-7.1	:
1986	90.2	:	0.9	:	90.5	:	1.3	:	90.3	:	2.2	:
1987	88.2	:	-2.2	:	88.3	:	-2.5	:	87.0	:	-3.7	:
1988	90.2	:	2.3	:	90.2	:	2.2	:	88.9	:	2.2	:
1989	100.9	:	11.9	:	101.4	:	12.4	:	102.6	:	15.3	:
1990	98.9	98.7	-2.0	:	98.7	99.2	-2.6	:	98.5	:	-4.0	:
1991	100.2	101.3	1.2	2.5	99.9	100.8	1.2	2.5	98.9	:	0.4	:
1992	97.1	100.0	-3.0	-1.3	96.2	98.9	-3.7	-1.3	93.1	:	-5.9	:
1993	:	100.3	:	0.4	:	99.9	:	0.4	:	:	:	:
1994	:	106.8	:	6.4	:	108.2	:	6.4	:	:	:	:
"1981"/"1991"			1.2	1.2*			1.0	1.3*			0.9	:

(1) With Germany in its territorial situation as prior to 03.10.1990

(2) With Germany in its territorial situation as after 03.10.1990, indices (1990-1991=100)

(*) "1991*"/"1994*" for the European Union in its territorial situation as after 03.10.1990

Indicators 2 (net income from agricultural activity of total labour input in real terms, per AWU) and 3 (net income from agricultural activity of family labour input in real terms, per AWU) underwent relatively similar

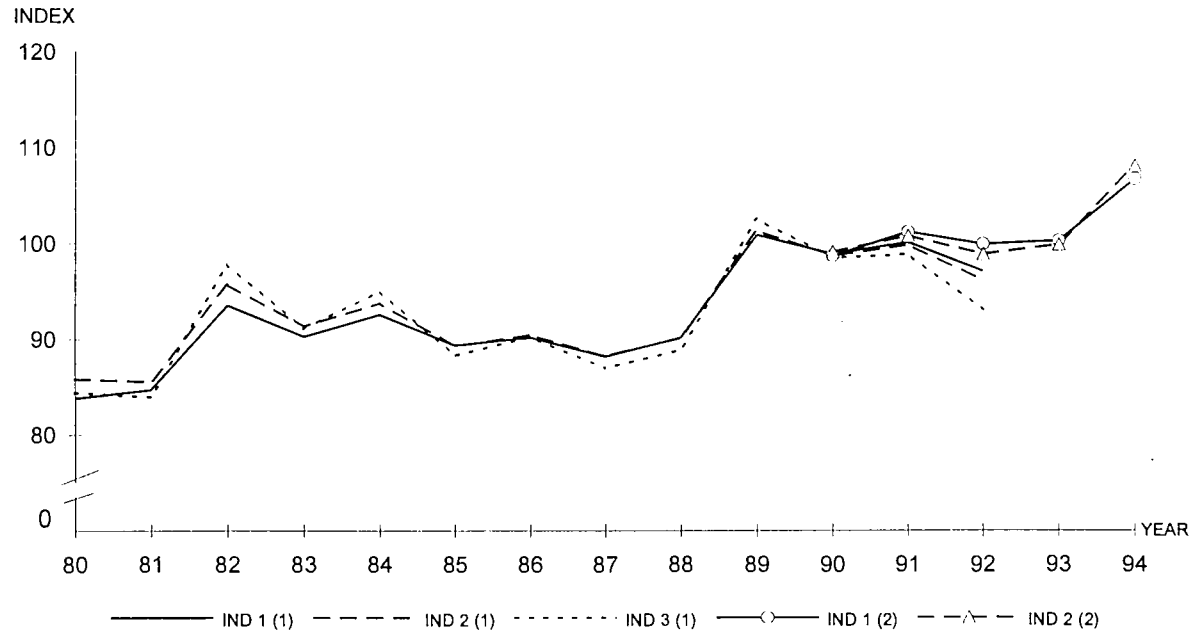
developments to Indicator 1, despite their wider fluctuations (see Graph 4.1). Agricultural income as expressed by Indicators 2 and 3 grew by annual averages of +1.0% and +0.9% respectively between "1981" and "1991". These Indicators are by definition subject to wider annual fluctuations than Indicator 1. Fluctuations in output volumes and prices are the main factors affecting fluctuations in income, with the impact of their variations on the income aggregate being much more pronounced, since net agricultural income, the basis for Indicators 2 and 3, is low in absolute terms. Moreover, the costs that distinguish these income aggregates from NVAfc are subject to fairly steady variations which tend to occur independently of short-term trends in the farming economy.

In the subsequent analysis, agricultural income is measured by Indicator 1, since the three Indicators display fairly similar trends (see Graph 4.1). Also, Indicator 1 is the most reliable macro-economic indicator for statistical purposes. Notwithstanding, section 4.4.3 examines the trends in Indicators 2 and 3 in relation to the supplementary cost items attributable to them.

The period "1981"/"1991" has been divided into three sub-periods to match the three distinct phases in the development of agricultural income. The strong growth in income in sub-period 1 was partly the result of a slight tailing-off in the fall of real prices and the "terms of trade" and partly of the rapid expansion in output. Sub-period 2 can be characterized by imbalances in numerous agricultural markets. These triggered an explosion of EU expenditure which led to some major changes in the CAP. These modifications involved principally the lowering of real institutional prices and the introduction of a system of stabilizers and quotas.

This deterioration in the agricultural situation was interrupted in 1988. The reorganization of European agricultural markets, which took place against the background of a restrictive EU policy and a temporary upturn in the world markets (characterized by destocking and price rises), was conducive to a recovery in agricultural income in 1988 and 1989. This short-term improvement in income, which was mainly due to major price rises (particularly those of animals and animal products) was, however, slightly offset by a further fall in prices in 1992 (particularly for crop products), which led to a fall in income for that year (-3.1%).

Graph 4.1 The development of Indicators 1, 2 and 3 of agricultural income for the European Union, from 1980 to 1994 ("1990" = 100 with the exception of (2))

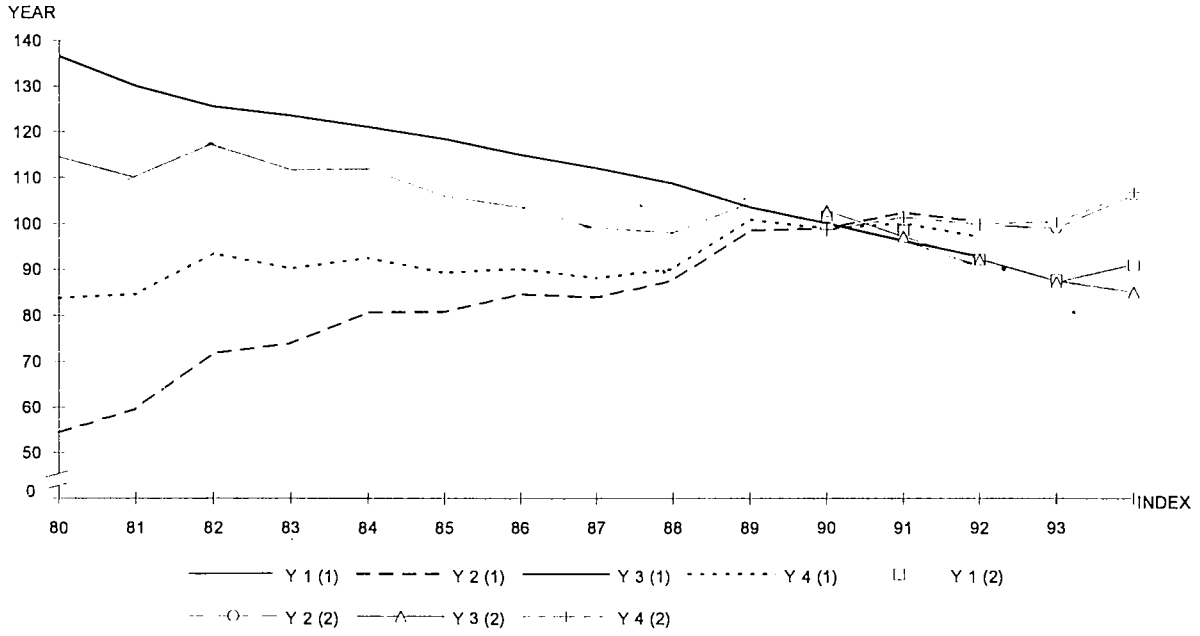


(1) With Germany in its territorial situation as prior to 03.10.1990
(2) With Germany in its territorial situation as after 03.10.1990, indices (1990-1991=100)

Between "1991*" and "1994*", the average annual increase in agricultural income in the European Union (according to its new territorial situation) was less high, only being +1.2% for Indicator 1 (and +1.3% for

Indicator 2). This slow-down in the development of income was essentially due to the lower prices observed for the years 1991, 1992 and 1993. This resulted from the combined effect of unfavourable elements in certain sectors (fresh fruit and fresh vegetables), the imbalance of markets (pigs and wine) and the change to the common organizations of the market (cereals, oilseeds, protein plants and cattle) carried out in the context of CAP reform. These price developments, compensated in part by the substantial rise in payments made under CAP reform, led to a relatively stable level of income in 1992 and 1993. Further increases in subsidies to the agricultural branch and the firming of prices (for the first time since 1989) set the basis for agricultural income to increase sharply in 1994.

Graph 4.2 **The development of Net Value Added at factor cost, in nominal and real terms, total labour input and Indicator 1 for the European Union, from 1980 to 1994 ("1990" = 100 with the exception of (2))**



Y1 = real net value added at factor cost
Y2 = nominal net value added at factor cost
Y3 = total agricultural labour input
Y4 = real net value added at factor cost per AWU (Indicator 1)
(1) With Germany in its territorial situation as prior to 03.10.1990
(2) With Germany in its territorial situation as after 03.10.1990, indices (1990-1991=100)

Changes in the main components of Indicator 1, nominal and real Net Value Added at factor cost and total labour input, are set out in Graph 4.2. It appears that:

- nominal NVAfc increased on average over the whole period. The increases were, however, generally below the level of inflation (measured by the average rate of inflation in the Member States, weighted according to the value of each product or aggregate, expressed in national currencies and converted into ECUs at 1990 rates[6]), with the result that real NVAfc declined.
- in the period under review, real NVAfc increased only in 1982, 1989, 1994 and, to a lesser extent, 1984. These four years were marked either by exceptional harvests (1982 and 1984) or by price rises in real terms (1989 and 1994). It also appears that the growth in real NVAfc during the 1982 and 1984 seasons resulted from a considerable growth in output volume, to a high level. In contrast, the large increases in 1989 and 1994 stemmed mainly from a combination of general economic factors (higher prices on the European Union and world markets, particularly for animals and animal products in 1989 and the increase

6 For more details, see methodological comment A.4.

in crop output prices in 1994) and structural factors (large increase in the balance of "subsidies - taxes linked to production" in 1989 and especially 1994 in the context of the reform of the CAP, which modified the system of support to agriculture).

- the upward trend of Indicator 1 since 1980 was thus solely due to the continuing decline in agricultural labour input. Indeed, the number of AWUs fell more rapidly than agricultural net value added at factor cost in real terms (an average -3.0% and -1.8% respectively per annum between "1981" and "1991"), thus causing Indicator 1 to rise slightly. Annual fluctuations in Indicator 1 were dictated exclusively by variations in agricultural net value added at factor cost in real terms, since the decline in the number of AWUs in agriculture was regular and steady.

The development of agricultural income in individual Member States can differ significantly from trends in the European Union as a whole. Whereas some Member States recorded increases in agricultural income which were well above the EU average (Ireland and Spain), others showed a fall (Italy and Portugal) or stability (the Netherlands). The same is true of variations in income and its relative change in the three sub-periods identified for the European Union. The change in agricultural income in some Member States (notably in Denmark and in Germany) was subject to major fluctuations attributable to, among other things, specific types of production and income structure. Movements in individual Member States broadly matched the three phases identified for the European Union as a whole.

4.3 Factors determining changes in income

There are many factors which determine changes in income and an exhaustive examination of them is difficult. Factors such as climatic conditions and production cycles (for some animal products) have no more than short-term effects on income. Any analysis of long-term changes in income must disregard these factors and focus on underlying trends. These structural elements include the overall agricultural environment (the CAP and the general economic situation), the state of the markets and the production process.

4.3.1 The agricultural environment

Article 39 (1b) of the Treaty of Rome states that one of the objectives of the Common Agricultural Policy is to ensure a fair standard of living for the agricultural community, in particular by increasing the earnings of persons engaged in agriculture. The regulation of markets and prices has been the main instrument of the CAP in the pursuit of that objective. The period 1980-1994 saw some major changes in the management and development of the CAP. After reaching self-sufficiency for most products, the European Union moved to a situation of production surpluses. This necessitated major budgetary reforms, which could not totally prevent the negative impact of the worsening markets on farm incomes. The milk sector was the first to be reformed, with the introduction in 1984 of quotas designed to stabilize the market in milk products. The reform of the CAP resulted in, among other things:

- the introduction of **stabilizers** and a maximum guaranteed quantity (MGQ), which implies that as soon as output in a particular sector exceeds a predetermined quantity, support levels are reduced automatically;
- unchanged or lower **institutional prices**, depending on the product (average annual declines of -3.7% in real terms between 1984/1985 and 1992/1993), designed to send clear signals to producers;
- more flexible **intervention mechanisms** (quantitative, qualitative and time-limits) designed to make intervention less attractive as a "substitute market" and to reinstate its function as a safety net under short-term variations in output.

As the effects of these adjustments were too limited, a **further reform of the CAP** was agreed in 1992 with the principal objective of adapting agricultural output to internal and external demand with a view to improving the balance of the markets as well as improving the competitiveness of EU agriculture. This reform was essentially characterized by a change from price support policy to a policy of direct income support. Without questioning the basic principles of the CAP, which are the unity of prices, community preference and financial solidarity, this reform was centred around three measures :

- **the substantial lowering of prices** (cereals, oilseeds, protein plants and cattle);

- compensation for the effects of this decrease in incomes through **direct compensatory payments** to producers (new direct compensatory payments and the upgrading of existing aid);
- **the control of output** through set-aside.

This reform entered into force at the start of the 1993/1994 marketing year (with the exception of oilseeds, from 1992/1993) and concerns a large number of agricultural sectors (with the exception of olive-oil, sugar, fruit and vegetables as well as wine). It is necessary to state that the lower prices and volumes recorded for the output concerned in 1993 and 1994 are linked, at least partially, to changes apparent in agricultural policy stemming from the **reform of the CAP**. This, through a partial change from price support policy to a policy of direct income support, makes it **difficult to compare the development of prices, volumes and subsidies in 1993 and 1994 with the rest of the period analysed** and significantly affects the development of gross value added at market prices and net value added at factor cost.

Changes in agricultural income therefore have to be seen in a broad economic context. The economic crises which affected Europe during the second oil shock in the early 1980s gradually gave way to a recovery which was slow in the years to 1986 and more pronounced in the period to 1991, although it was insufficient to make a significant dent in unemployment. The second half of 1990 brought a sudden slowdown in economic growth and certain Member States experienced severe recession in 1992 and 1993. These economic difficulties had some impact on agricultural income and the implementation of the CAP reforms, and poorer job prospects elsewhere stemmed the decline in agricultural labour input.

The monetary policies pursued by the Member States also had an impact on agricultural incomes through the development of real prices of agricultural products and of interest rates. Also, some countries tended to keep their currencies undervalued in the early 1980s. In the period which followed, the effects of the decline in inflation and the discipline of the European Monetary System (EMS) combined to ensure greater stability between real exchange rates, which reduced the scope for devaluing "green" currencies and adjusting institutional prices, expressed in national currencies, to currency revaluations. Real interest rates remained slightly higher during this period, despite being greatly lowered over the course of the last few years. Since September 1992, the important monetary realignments apparent in the EMS have resulted in the devaluation of green currencies, allowing therefore, in certain Member States, a rise in agricultural prices expressed in national currency terms.

4.3.2 The state of the markets and production processes

The strong growth in agricultural income in the 1960s and early 1970s took place in the context of a major restructuring of European agriculture, which was still not self-sufficient in many sectors. The situation then changed dramatically. Growing disparities between the output volumes and consumption of agricultural products led to surpluses which the European Union and world markets were not always able to absorb. Increased agricultural output, resulting from new technical and biological developments, led to the European Union becoming self-sufficient in nearly all non-tropical agricultural products, with the exception of oilseeds, fruit, and sheepmeat. However, this led to a deterioration of the agricultural markets, which had repercussions on market prices and therefore on agricultural incomes. The main products to be affected were cereals, cattle, pigs and milk.

The changes in agricultural structures, which had undergone profound changes in the previous two decades, slowed down somewhat in the face of the harsher economic environment and imbalances in the markets. These factors acted as a brake on the modernization of agricultural holdings and the process of agricultural intensification.

4.4 Changes to the income components

4.4.1 Agricultural output

The volume of agricultural output grew fairly regularly between "1981" and "1991" (by an annual average of +1.2%), slightly more strongly in the first half of the 1980s under the impetus of crop output (see Table 4.2). The growth in the volume of crop output (an average +1.9% per annum) exceeded that of animal output (+0.5% per annum) during the period under review.

The price index for agricultural products fell significantly, by an annual average of -3.1% in real terms, particularly from "1984" onwards, as institutional prices declined in real terms and whilst there were structural surpluses on European Union and world markets. The real value of final agricultural output declined by an average -2.0% per annum as a result of changes to real prices and volumes. This decline, which was more marked for final animal output than for final crop output, was particularly pronounced between "1984" and "1987" (-3.3% per annum) as a result of steep falls in real prices.

This decline in the value of output was particularly pronounced for animal output, where very weak volume growth (+0.5% per annum on average) was insufficient to compensate for the fall in real prices (-3.3% per annum), thus producing an average annual decline of -2.8% in the final real value of output. Following a period of slow growth between 1980 and 1983, the volume of animal output stayed relatively level during the last ten years of the review period. This is particularly true of milk after the introduction of quotas, and of beef. The pronounced decline in real prices which was observed over the course of the reference period reflected the state of the markets where supply was much greater than demand (particularly for beef, which was the only meat whose consumption fell between "1981" and "1991").

Table 4.2 Average annual rates of change in the volumes, real prices and real values of both crop and animal output as well as final agricultural output in the European Union over the course of the period "1981"/"1994*", in %

	Volume					Real price					Real value				
	SSP1	SSP2	SSP3	P (1)	P (2)	SSP1	SSP2	SSP3	P (1)	P (2)	SSP1	SSP2	SSP3	P (1)	P (2)
Final crop output	2.5	2.0	1.3	1.9	0.1	-2.0	-3.8	-2.9	-2.9	-6.8	0.4	-1.9	-1.6	-1.1	-6.7
Final animal output	1.0	-0.1	0.5	0.5	0.1	-2.1	-4.5	-3.2	-3.3	-3.9	-1.1	-4.6	-2.8	-2.8	-3.8
Final output	1.7	0.9	1.0	1.2	0.1	-2.1	-4.1	-3.1	-3.1	-5.3	-0.4	-3.3	-2.1	-2.0	-5.2

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1991" P = "1981"/"1991"

(1) SSP1, SSP2, SSP3 and P with Germany in its territorial situation as prior to 03.10.1990

(2) P = "1991*"/"1994*" with Germany in its territorial situation as after 03.10.1990

In contrast, there were significant increases (averaging +1.9% per annum) in the volume of crop output, which were able to some extent to compensate for the impact of declining real prices (averaging -2.9% per annum); the real value of crop output fell by -1.1% per year on average. Climatic conditions were such that the growth in the volume of crop output was erratic. Strong growth was recorded in two years: in 1982, output volume grew by +9.7%, mainly due to growth in cereal output (+12.4%), fresh fruit (+12.3%), wine (+38.4%) and industrial crops (+17.8%) and in 1984, cereals (+36.4%), flowers (+9.2%) and industrial crops (+24.9%) largely accounted for higher crop output volume (+5.4%).

From "1991*" to "1994*", the real value of final agricultural output decreased by an average of -5.2% per year. With final output volume remaining relatively stable (an average +0.1% per year), the strong fall essentially resulted from the considerable decline in prices recorded over the course of the period 1990 to 1993. Crop output was most affected by these changes of a general and policy-oriented nature (the reform of the CAP), particularly for cereals (-8.8% per year on average between "1991*" and "1994*"), oilseeds (an average -19.0% per year), fresh fruit (an average -10.8% per year) and wine (an average -8.7% per year). Animal output recorded less pronounced fluctuations, with the exception of pigs for which the price dropped considerably because of the persistent imbalance of the market for pigs.

In the light of these developments, the share of crop output in final agricultural output, measured at current prices, rose from 45% in "1981" to 49% in "1993", principally due to fresh vegetables, fresh fruit, wine and flowers (see Graph 4.3).

a) Crop output

Cereals

Cereal output rose in volume terms, by +2.5% per annum on average, between "1981" and "1991". This rate of increase varied because of fluctuating climatic conditions (droughts during some more recent years) and,

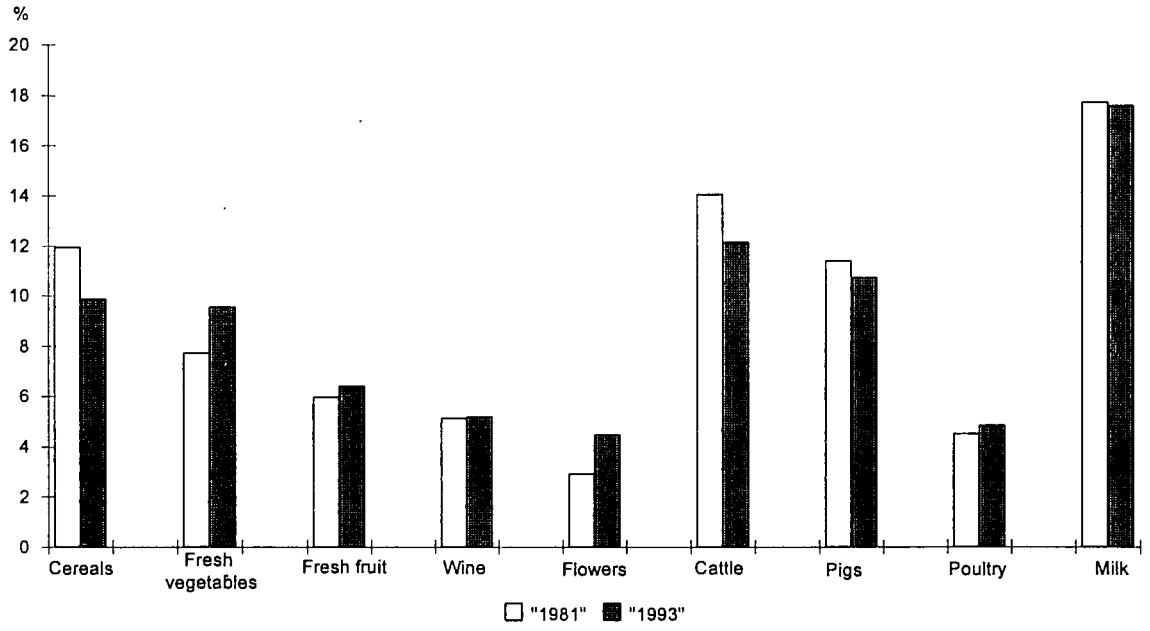
with the exception of wheat and maize, tended to slow-down greatly towards the end of the reference period (particularly for barley), the result of greater yields which more than offset the smaller area under cereals.

There were fairly major declines in producer prices between "1981" and "1984" (-3.9% per annum on average in real terms), when markets were saturated and intervention stocks were at very high levels. The decline in real prices then accelerated (an average -5.5% per annum) in the wake of a restrictive price and intervention policy (reduction in real support prices of -6.1% per annum between 1984/1985 and 1992/1993, and the introduction in 1988 of the stabilizer mechanism, which limited the price guarantee) and of growing surpluses on the European Union and world cereal markets (with, at the end of the period, intervention stocks that had returned to some high levels)

The real value of output thus grew by an average +1.6% per annum during "1981" and "1984" before declining by an average -4.4% per annum between "1984" and "1991", giving an average annual decline of -2.7% over the period "1981"/"1991".

The considerable declines in the volume and real price recorded between "1991*" and "1994*" (an average -2.6% and -8.8% per year respectively) should be considered in the context of the reform of the CAP whose application from the 1993/1994 marketing year was reflected by a strong fall in institutional prices and by compulsory set-aside. This lower output volume was especially evident for barley (-12.6% per year on average), with changes for wheat and maize being -2.9% per year and +7.5% per year on average.

Graph 4.3 **The share of the main individual products in the final agricultural output of the European Union in "1981" and "1993", at current prices and current exchange rates, in %**



Root crops (sugarbeet and potatoes)

The real value of root crop output fell by an annual average of -3.2% between "1981" and "1991". Output volume was stable over the decade as a whole (an average +0.1% per annum), despite large annual fluctuations. In more detail, the volume of sugarbeet output fell by an average -0.2% per annum during the period under review, whereas that of potatoes increased by an average +0.4% per annum. Real producer prices of sugarbeet and potatoes declined considerably (an average -3.4% and -3.2% respectively per annum), particularly those of potatoes from "1984" onwards (an average -4.6% per annum).

Oilseeds

The output volume of oilseeds rose rapidly until "1987" (an average +20.6% per annum) thanks to the introduction of the European Union's production aid scheme and, to some extent, the restrictive policy in the

cereals sector. The establishment of guarantee thresholds and, then, in 1992, the reform of the common organization of the market in oilseeds subsequently caused the increase in output volume to slow down and then to decline by an average -6.9% per year on average between "1991*" and "1994*". Real prices, which were fairly stable from "1981" to "1984", later fell (an average -6.6% per annum from "1981" to "1991" but -19.0% per year on average between "1991*" and "1994*") in line with the reduction in European Union support. Despite this fall in prices at the end of the period and the strong decline between "1991*" and "1994*", oilseeds were the agricultural product for which the real value of output grew the fastest on average over the course of the reference period "1981"/"1991" (+5.7% per annum).

Fresh fruit and vegetables[7]

Despite their sensitivity to climatic conditions, the volume of fresh fruit and fresh vegetable output grew fairly constantly over the period (+1.7% and +0.7% per year on average). This growth was based on improved yields, an unchanged cultivated area for fresh fruit and a slightly smaller one for fresh vegetables. The long-term trend in real prices was one of steady decline (an average -1.8% and -2.3% per year respectively), although at a less pronounced rate than the decline in final agricultural output prices. Therefore, whereas the real value of the output of fresh vegetables declined very slightly (-0.1% per year on average), the real value of fresh fruit fell more strongly (an average -1.6% per annum) between "1981" and "1991".

Table 4.3 Average annual rates of change in the volumes, real prices and real values of crop products in the European Union between "1981" and "1994*", in %

	Volume					Real price					Real value				
	SSP1	SSP2	SSP3	P (1)	P (2)	SSP1	SSP2	SSP3	P (1)	P (2)	SSP1	SSP2	SSP3	P (1)	P (2)
Final crop output	**2.5**	**2.0**	**1.3**	**1.9**	**0.1**	**-2.0**	**-3.8**	**-2.9**	**-2.9**	**-6.8**	**0.4**	**-1.9**	**-1.6**	**-1.1**	**-6.7**
Cereals	5.7	1.2	1.1	2.5	-2.6	-3.9	-5.6	-5.5	-5.0	-8.8	1.6	-4.5	-4.4	-2.7	-11.1
Potatoes	-0.2	0.1	1.1	0.4	0.0	0.2	-7.1	-2.6	-3.2	-2.7	-0.1	-7.0	-1.5	-2.8	-2.8
Sugarbeet	-3.9	1.6	1.3	-0.2	-1.5	-2.1	-3.5	-4.3	-3.4	-2.0	-6.0	-1.9	-3.1	-3.6	-3.5
Oleaginous seeds	19.9	21.4	2.8	13.1	-6.9	-0.7	-6.6	-10.7	-6.6	-19.0	19.0	13.4	-8.3	5.7	-24.6
Fresh vegetables	1.7	1.2	2.1	1.7	-0.2	-1.3	-2.8	-1.3	-1.8	-4.3	0.4	-1.7	0.7	-0.1	-4.5
Fresh fruit	1.5	0.5	0.4	0.7	5.4	-1.8	-2.7	-2.4	-2.3	-10.8	-0.3	-2.3	-2.0	-1.6	-6.0
Wine	0.1	1.9	-0.6	0.3	-0.3	-4.6	-3.2	2.3	-1.5	-8.7	-4.5	-1.4	1.7	-1.1	-9.0
Olive oil	3.4	-3.4	0.2	0.0	3.7	-1.6	-3.5	0.4	-1.4	-6.4	1.7	-6.8	0.5	-1.4	-2.9
Flowers	4.3	4.4	4.4	4.4	2.1	-1.5	-2.8	-3.4	-2.7	-2.7	2.7	1.5	0.8	1.6	-0.6

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1991" P = "1981"/"1991"

(1) SSP1, SSP2, SSP3 and P with Germany in its territorial situation as prior to 03.10.1990

(2) P = "1991*"/"1994*" with Germany in its territorial situation as after 03.10.1990

Wine

The volume of wine output remained relatively stable between "1981" to "1991" (+0.3% per annum on average), despite a European Union policy whose main instruments for supporting the wine market were private storage aid and distillation subsidies. During the 1980s, European Union policy was aimed at reducing the imbalance between European Union wine output and falling consumption. These interventions were later supplemented by structural measures designed to encourage wine growers to cease production (grubbing-up). The area under vines fell between "1981" and "1991". Therefore, the stability of wine output only resulted from higher yields. Wine prices generally fell in real terms (-1.5% per annum on average) despite a recovery which began in 1988 and continued at high levels in 1989 and 1990. The drop in real prices reflected structural overproduction in European viticulture at a time of falling consumption, and triggered large-scale distillation (which regularly exceeded 20 million hectolitres for compulsory and optional distillation).

Having been particularly down between "1981" and "1984", the low level of the real value of wine output increased thanks to higher output volumes in 1986 and 1987 and the stabilization of real prices which began

7 Including citrus fruit, tropical fruit and table grapes.

in "1987". Over the whole of the period "1981"/"1991", this gave rise to an average annual decline of -1.1%. From "1991*" to "1994*" the price in real terms decreased strongly (an average -8.7% per year), which led to a decline in the real value of wine output of an average -9.0% per year.

b) Animal output

Milk

Milk accounts for a larger share of total agricultural output in the European Union than any other product (about 17%). The common organization of the market in milk, which operates a price and intervention system relatively similar to that for cereals and an assortment of stocking and production aids, has been conducive to a major increase in output; it rose continually between 1973 and 1983.

Beginning in 1984, there were serious imbalances on the European Union's milk markets; supply was far greater than demand, and surpluses exceeded 10 million tonnes. To counter this situation, a system of production quotas was introduced. The application of milk quotas led to a reduction in output volume and diversification into products with higher value added (cheese, fresh products). Over the reference period, output volume declined by -0.5% per annum after having reached its highest level in 1983.

Over the period as a whole, the state of milk markets caused real producer prices to fall by an annual average of -1.9%, despite the support given to the sector. This, plus the effect of production quotas from 1984 onwards, caused the real value of milk output to decline by an average -2.4% per annum.

Table 4.4 Average annual rates of change in the volumes, real prices and real values of animal output in the European Union between "1981" and "1994*", in %

	Volume					Real price					Real value				
	SSP1	SSP2	SSP3	P (1)	P (2)	SSP1	SSP2	SSP3	P (1)	P (2)	SSP1	SSP2	SSP3	P (1)	P (2)
Final animal output	**1.0**	**-0.1**	**0.5**	**0.5**	**0.1**	**-2.1**	**-4.5**	**-3.2**	**-3.3**	**-3.9**	**-1.1**	**-4.6**	**-2.8**	**-2.8**	**-3.8**
Cattle	0.9	-0.9	0.5	0.2	-2.0	-2.6	-4.6	-4.0	-3.8	-1.0	-1.7	-5.4	-3.5	-3.6	-2.9
Pigs	1.6	2.0	1.6	1.7	2.6	-2.9	-8.4	-1.5	-4.0	-8.9	-1.4	-6.5	0.1	-2.4	-6.5
Sheep and goats	0.6	2.3	1.2	1.4	2.3	-2.6	-3.5	-6.7	-4.5	-3.8	-2.0	-1.3	-5.6	-3.2	-1.6
Poultry	0.2	2.9	4.2	2.6	2.9	-1.5	-6.3	-5.3	-4.5	-4.1	-1.3	-3.6	-1.3	-2.0	-1.4
Milk	1.2	-1.5	-1.0	-0.5	-1.0	-1.1	-1.8	-2.6	-1.9	-2.2	0.1	-3.3	-3.6	-2.4	-3.2
Eggs	-1.0	-1.2	-0.9	-1.0	-0.5	-2.3	-5.0	-3.4	-3.6	-5.4	-3.2	-6.1	-4.3	-4.5	-5.9

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1991" P = "1981"/"1991"

(1) SSP1, SSP2, SSP3 and P with Germany in its territorial situation as prior to 03.10.1990

(2) P = "1991*"/"1994*" with Germany in its territorial situation as after 03.10.1990

Cattle (including calves)

The rise in the volume of cattle output between "1981" and "1984" (an average +0.9% per year) was set against a background of unchanging consumption, which was reflected by an imbalance between supply and demand. The introduction of quotas in the milk sector led to large-scale slaughtering of milk cows, this in turn compounding the imbalances in cattle markets. Cattle output declined slightly (an average -0.9% per annum) from "1984" to "1987" as a result of reduced cattle numbers, before recovering (by an annual average of +0.5%) between "1987" and "1991". Over the period as a whole, the volume of cattle output was fairly stable (an average +0.2% per annum). Real prices declined by -3.8% per annum on average between "1981" and "1991". Market surpluses, combined with a decline in beef and veal consumption, had an adverse effect on prices. The upturn in the markets, recorded in 1988 and 1989, was no more than a short-term adjustment.

The slight increase in output volume and the sharp decline in real prices were reflected in a decrease in the real value of output (-3.6% per annum on average).

Between "1991*" and "1994*", the volume of cattle output decreased by an average -2.0% per year, because of the marked cyclical pattern. With the decline in supply and despite lower institutional prices adopted in the context of CAP reform, the fall in producer prices was limited to an average -1.0% per year in real terms.

Pigs

The volume of pig output, sustained by high consumption levels, rose almost uninterruptedly from "1981" to "1991", by an annual average of +1.7%. There was a slight decline in 1988/1989, brought about by the fall in prices in the wake of the swine fever crisis and the downward phase of the pig production cycle. The pig sector is assisted by price support and intervention measures, but not by guaranteed prices. Real producer prices declined by an average -4.0% per year between "1981" and "1991". The falls were particularly severe from 1986 to 1988, during the swine fever crisis. Prices rallied in 1989 (thanks to a fall in supply), only to decline again in 1990, 1991 and particularly 1993 (a new crisis linked to sanitary problems). This sharp drop in real prices caused the real value of output to fall by -2.4% per year over the period as a whole.

4.4.2 Intermediate consumption

Between "1981" and "1991", the volume of intermediate consumption grew by an annual average of +0.9%. Real prices declined by -0.4% per annum on average between "1981" and "1984". The decline accelerated in 1986 and 1987, in line with world prices for agricultural commodities, the weaker dollar and lower oil prices. Despite a slight slowdown in the subsequent period, prices declined by an annual average of -2.9% over the period "1981"/"1991". With the increase in consumption being more stable in volume terms, the real value of intermediate consumption moved in parallel with real prices, showing an average annual decline of -2.0% over the period under review.

Table 4.5 Average annual rates of change in the volumes, real prices and real values of intermediate consumption in the European Union from "1981" to "1994*", in %

	Volume					Real price					Real value				
	SSP1	SSP2	SSP3	P (1)	P (2)	SSP1	SSP2	SSP3	P (1)	P (2)	SSP1	SSP2	SSP3	P (1)	P (2)
Intermediate consumption	**1.0**	**1.4**	**0.3**	**0.9**	**-0.8**	**-0.4**	**-5.4**	**-2.8**	**-2.9**	**-2.3**	**0.7**	**-4.1**	**-2.5**	**-2.0**	**-3.1**
Energy	0.1	2.4	1.1	1.2	0.4	0.9	-11.9	-1.2	-4.0	-2.6	1.0	-9.8	-0.1	-2.8	-2.2
Fertilizers	0.7	1.2	-2.3	-0.4	-4.7	-1.4	-7.1	-4.9	-4.5	-5.0	-0.7	-6.1	-7.1	-4.9	-9.5
Plant protection products	4.6	4.3	1.3	3.1	-4.0	-0.1	-2.3	-1.4	-1.3	-1.1	4.5	1.8	-0.1	1.8	-5.0
Feedingstuffs	0.9	0.6	0.7	0.7	0.9	-0.9	-6.4	-4.8	-4.1	-3.6	0.0	-5.8	-4.1	-3.4	-2.7
Materials and small tools	-0.1	-0.3	-0.2	-0.2	-1.4	0.8	0.1	-0.4	0.1	1.2	0.7	-0.2	-0.5	-0.1	-0.3
Services	0.9	1.2	1.3	1.1	-0.6	0.6	-0.5	-0.8	-0.3	-0.4	1.5	0.7	0.4	0.8	-1.0

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1991" P = "1981"/"1991"

(1) SSP1, SSP2, SSP3 and P with Germany in its territorial situation as prior to 03.10.1990

(2) P = "1991*"/"1994*" with Germany in its territorial situation as after 03.10.1990

Although animal feedingstuffs were consistently the largest item of intermediate consumption, their share declined from 45% in "1981" to 39% in "1993". The main reason for this decline was the large fall in the real prices of animal feedingstuffs. The proportion of intermediate consumption accounted for by materials and services rose over the fifteen years, suggesting continued agricultural intensification and technological development.

a) Fertilizers and additives

There was a slight decline in the volume of fertilizers and soil additives consumed over the reference period (an average -0.4% per annum), although this reduction conceals large fluctuations since it resulted from a slight rise until 1987 and then a sharp fall during more recent years (a restrictive agricultural policy, changes to some production systems and environmental requirements). Fertilizer prices decreased in real terms by an annual average of -4.5%. The decline was particularly steep from "1984" to "1987" (an average -7.1% per annum), because of falling energy prices (especially of crude oil), the weaker dollar and tougher competition on the European market. The small reduction in the volume of fertilizers, combined with a sharp fall in prices, led to a decrease in the real value of fertilizer consumption by an annual average of -4.9% from "1981" to "1991".

b) Energy, small tools, services and plant protection products

Energy prices fell back slightly in real terms until 1986, before nose-diving in the period to 1989 as a result of the weaker dollar and declining oil prices. Over the period as a whole, real prices went down by an average of -4.0% per annum. Agricultural producers used more energy particularly in the period from 1986 (by an average of +1.2% per annum from "1981" to "1991") because of falling prices. The volume of materials and small tools used fell very slightly over the period under review (-0.2% per annum), while prices remained relatively stable (+0.1%). The volume of services rose from "1981" to "1991" (an average +1.1% per annum), whilst their real price declined by an average -0.3% per year. The volume of plant protection products used increased strongly, by an average of +3.1% per annum from "1981" to "1991", this being related to a decline in the real price (averaging -1.3% per annum). Nevertheless, as for fertilizers, a reversal of the trend has been observed for some years, being particularly marked in 1992 and 1993. Between "1991*" and "1994*", the decline in their consumption volume increased to an average -4.0% per year.

c) Animal feedingstuffs

The consumption of animal feedingstuffs grew in volume terms by an annual average of +0.7% over the period "1981"/"1991". This was despite a slight decline in 1984 and 1985, which can be attributed to higher feedingstuff prices in those two years and to the sharp reduction in the milk herd following the introduction of quotas. The price of feedingstuffs fell in real terms in 1986 and 1987 in line with world commodity prices (particularly soya, manioc and other substitute feedingstuffs) and the weaker dollar. In spite of a slight short-term reversal in 1988 and 1989 due, in part, to the drought in the United States, this trend continued, benefiting from the significant decline in the prices of primary materials of agricultural origin from 1992 onwards, following the reform of the CAP. Over the course of the period "1981"/"1991", real prices declined by an annual average of -4.1%. This strong decline and the slight increase in volume combined to give an annual average fall of -3.4% in the real value of feedingstuffs.

d) Productivity of intermediate consumption and the "terms of trade"

Agricultural output and intermediate consumption have both been examined separately. The following is a comparison of changes in volumes and prices. The productivity of intermediate consumption is defined for present purposes as the ratio between the volume of output and the volume of intermediate consumption. Similarly, the "terms of trade" are the ratio between the nominal producer price index and the nominal price index of intermediate consumption.

Between "1981" and "1984", agricultural output grew more rapidly in volume terms than intermediate consumption. This resulted in a slight increase in the productivity of intermediate consumption (see Graph 4.4). The productivity ratio declined slightly between "1984" and "1987", which was surprising in view of the decline in the share of total output accounted for by animal output.

It would appear that animal output is largely responsible for this decline in the productivity ratio of intermediate consumption in the second sub-period. Indeed, the cost of animal feedingstuffs can be attributed to animal consumption. The volume of feedingstuffs consumed grew fairly steadily from "1984" to "1987" (an average +0.6% per year), whereas the volume of animal output remained constant over the same period (an average -0.1% per year). During this period, the prices of animal feedingstuffs, which had represented slightly more than 40% of intermediate consumption in EUR 12, declined continuously (an average -6.4% per annum). This may have caused the consumption of feedingstuffs to rise, yet without triggering a proportional increase in output. Lower prices may have given rise to purchases of feedingstuffs in sectors other than agriculture (i.e. feedingstuffs not produced on agricultural holdings within the meaning of the methodology of the Economic Accounts for Agriculture (EAA)). This would have been taken into account in the EAA, unlike feedingstuffs produced on the "national farms" (accounted for as own-consumption). Similarly, the growth in the use of fertilizers and plant protection products in volume terms seems to correspond to the rise in the volume of crop output to which they were destined.

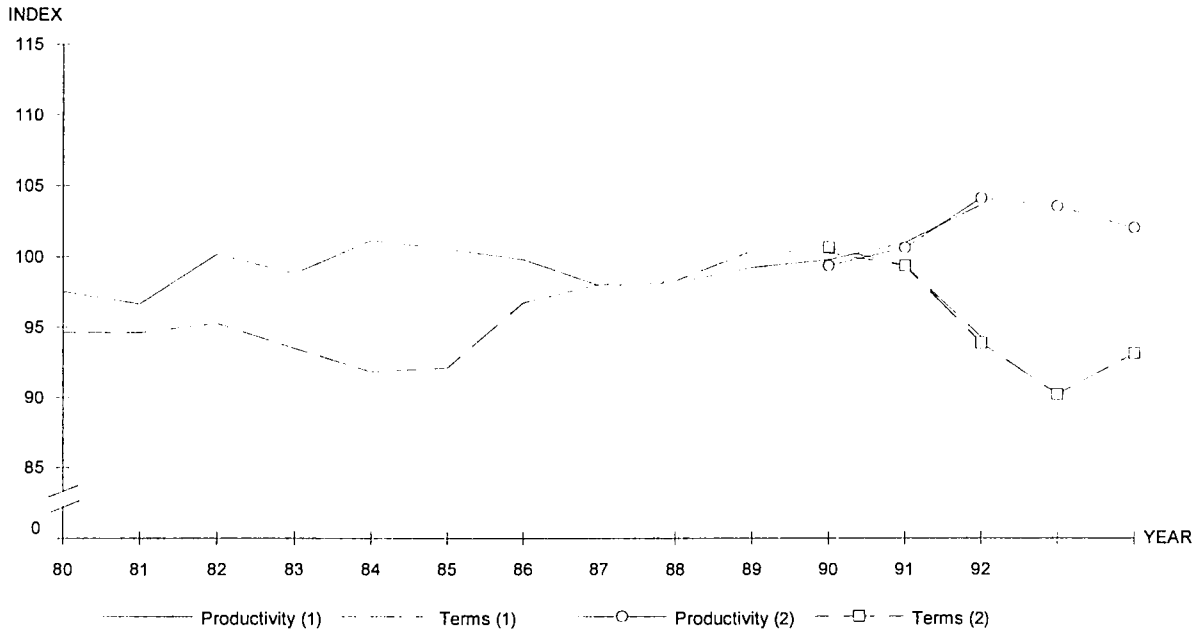
It would appear that the high level of productivity of intermediate consumption during the sub-period "1987" to "1991" was due to the development of crop output, animal output having a similar development to the use animal feedingstuffs. Changes in this indicator of productivity must, however, be interpreted with care:

- this productivity ratio must be examined in a long-term perspective, since it is fairly sensitive to short-term changes, particularly climatic factors, which can have a significant effect on output volume. Nor can this

measure of productivity be compared with productivity as defined in other economic sectors. The productivity of intermediate consumption concerns only the factor of output. All the variations in output which can stem from other factors (capital and labour etc.) are thus attributed to intermediate consumption.

- own-consumption at the level of the agricultural branch causes some distortion, as a consequence of the adoption of the notion of the "national farm" in the drawing-up of the EEA. In fact, it is not covered in the EAA (see above) and can lead to underestimates of the real level of intermediate consumption. The productivity ratio of intermediate consumption can therefore vary from one Member State to another (depending on the relative importance of animal output and fodder output) and can be affected by climatic conditions and conditions of supply and demand for substitution products (i.e. products purchased outside the agricultural branch).

Graph 4.4 Development of the productivity of intermediate consumption and of the "terms of trade" in the European Union between "1981" and "1994*" ("1990" = 100 with the exception of (2))



(1) With Germany in its territorial situation as prior to 03.10.1990
(2) With Germany in its territorial situation as after 03.10.1990, indices (1990-1991=100)

The "terms of trade" declined from "1981" to "1984" (an average -0.9% per annum), thereby continuing the steady deterioration which had taken place in most Member States since 1975, but staged a recovery starting in "1984" before stabilizing between "1987" and "1991" (an overall average of +0.7% per annum from "1984" to "1991"). Nominal prices of agricultural output increased by +1.0% per year on average from "1984" to "1987", as against -0.8% for intermediate consumption. This was due particularly to energy, animal feedingstuffs and fertilizers, the prices of which fell considerably in 1986 and 1987 in the wake of lower oil prices, a weaker dollar and the decline in world prices for agricultural commodities. After "1987", the fall in the prices of agricultural products was similar to intermediate consumption prices, resulting therefore in a stabilization of the "terms of trade" (averaging +0.1% per year). Over the period as a whole, therefore, the "terms of trade" slightly increased (+0.3% per annum on average)[8].

8 However, when this ratio is expressed in real terms there was a fall of -0.2% per year because of a more rapid decline in real prices of agricultural output (-3.1% per year) than in those of intermediate consumption (-2.9%). These two ratios diverge because of the more important weighting of high inflation countries (particularly Italy and Greece) in the output price index than in the intermediate consumption price index, in which northern European countries with moderate inflation rates have greater weight.

From "1991*" to "1994*", the considerable decline in the prices of agricultural products greatly affected the "terms of trade", that declined by an average annual -2.9%.

4.4.3 Other components of income

It must be stressed that the **subsidies** covered by the EAA are only those which consist of direct transfers to agriculture, i.e. excluding price support, investment grants, aid given to the buyers of agricultural products and transfers to agricultural households. As a result, neither the level nor the trend of subsidies within the sense of the EAA reflect the overall aid received by the agricultural sector in the European Union. These subsidies regularly increased (by an average +6.6% per annum in real terms) and account for a growing share of gross value added at market prices, 12% in "1991" against 5% in "1981". This large increase in subsidies to the agricultural branch has continued but in an even more pronounced fashion for 1992 and 1993, with the setting-up, in the context of the reform of the CAP, of a new policy towards certain sectors of agricultural output. This is seen by the replacement of a part of price support by some direct income payments. In this way it led to a substantial rise in subsidies (an average +18.4% per year in real terms) from "1991*" to "1994*", so now representing about 20% of gross value added at market prices. The amount of **taxes linked to production** stabilized over the period, the rises for the first two sub-periods being more than offset by the falls in recent years (principally due to the dismantling of co-responsibility levies for milk and cereals). Over the whole of the reference period "1981"/"1991", the rise in taxes linked to production was an average +0.4% per year, with, for all that, a large reduction between "1991*" and "1994*" (an average -11.4% per year).

It should be pointed out that the examination of these items reflects widely varying conditions in different Member States. Indeed, the system and extent of agricultural support and disparate methodologies concerning their treatment are able to cause considerable variations between Member States. Some care therefore has to be taken when examining the absolute value of these items, although the balance of (subsidies less taxes linked to production) reflects the growing support given to agriculture in the form of direct transfers to producers. The "net" subsidies represented nearly 17% of gross value added at market prices in "1993*" (compared with 2% in "1981"), which confers on them a significant importance. The importance of subsidies has grown in the context of a new support system for agriculture.

The real value of **depreciation** increased slightly between "1981" and "1984" (an average +0.9% per annum) before stabilizing (+0.3% per annum on average). It appears that the less favourable situation in 1992 and 1993 and a more restrictive agricultural policy weighed down investment in the agricultural sector. Nevertheless, the share of depreciation in the gross value added at market prices was on an upward trend from 1985 (19% in "1981" and 24% in "1991"), which reflects renewed increases in capitalization costs in the agricultural branch and, more generally, a general intensity of the production process.

It is not possible to interpret the development of **Net Value Added at factor cost** in relation to a specific type of production, because intermediate consumption, subsidies, taxes linked to production and depreciation are not broken down along these lines. Real NVAfc declined by an annual average of -1.8% between "1981" and "1991". This decline was particularly pronounced between "1984" and "1987", when the real value of final agricultural output decreased (-3.3% per annum) in line with the fall in the real prices of products (cereals, root crops, oilseeds, fresh fruit, cattle and pigs). It was accentuated in the period "1991*" to "1994*" (averaging -3.7% per year).

The share of **interest, rent and compensation of employees** in gross value added at market prices was broadly unchanged from "1981" to "1991" at about 11%, 4% and 18% respectively. The stability of these figures confirms that these components had little impact on net income for the European Union as a whole (although this may not be true of individual Member States). In real terms, their costs fell by -0.3%, -1.7% and -1.4% respectively per annum over the period "1981"/"1991".

The real **net incomes of total labour input and family labour input** moved in line with real net value added at factor cost, falling by an average -2.0% and -2.2% respectively per annum over the period under review. Therefore, when the declines in total labour input (an average -3.0% per annum) and in family labour input (an average -3.1% per annum) are taken into account, Indicators 2 and 3 of agricultural income rose by +1.0% and +0.9% respectively, per annum on average. These figures, which are therefore similar to the corresponding figure for Indicator 1, underline once again the relatively weak long-term impact of interest

costs, rent and compensation of employees on the average changes in Indicators 2 and 3 for the European Union as a whole (at a time when reductions in total labour input and in family labour input are very similar).

Table 4.6 Average annual rate of change in the components of the Indicators of agricultural income in the European Union, from "1981" to "1994*" and development in the share of each component as a percentage of gross value added mp, in %

	Real value					as % of Gross Value Added mp		
	SSP1	SSP2	SSP3	P (1)	P (2)	"1981"	"1991"	"1993"
Final output	-0.4	-3.3	-2.1	-2.0	-5.2			
Intermediate consumption	0.7	-4.1	-2.5	-2.0	-3.1			
Gross value added at m.p.	-1.2	-2.6	-1.8	-1.9	-6.9	100.0	100.0	100.0
Subsidies	7.7	5.3	6.7	6.6	18.4	5.1	11.6	20.6
Taxes linked to production	2.0	4.6	-3.7	0.4	-11.4	2.8	3.6	3.3
Depreciation	0.9	0.6	0.1	0.5	-2.0	18.6	23.7	26.4
Net value added at f.c.	-1.3	-3.0	-1.3	-1.8	-3.7	83.6	84.4	90.9
Rent	-1.5	-1.5	-1.9	-1.7	-2.8	3.7	3.7	4.3
Interest	1.3	-2.1	-0.2	-0.3	-5.0	9.9	11.6	11.8
Net income of total labour	-1.6	-3.2	-1.4	-2.0	-3.6	70.1	69.1	74.9
Compensation of employees	-1.8	-2.1	-0.6	-1.4	:	18.1	19.0	:
Net income of family labour	-1.5	-3.6	-1.7	-2.2	:	52.0	50.0	:

(1) With Germany in its territorial situation as prior to 03.10.1990

(2) With Germany in its territorial situation as after 03.10.1990, indices (1990-1991=100)

(*) "1991*"/"1994*" for the European Union in its territorial situation as after 03.10.1990

5 Long-term-trends in agricultural income in the Member States from 1980 to 1994

5.1 Introduction

The development of agricultural income in the Member States of the European Union differed considerably in the period "1981"/"1993". Specific scrutiny of agricultural income in each Member State is based on the division of the reference period into the three sub-periods adopted in Chapter 4. The different overall developments recorded, mainly stem from the strength of the changes in each phase for each Member State and from factors such as the climatic conditions particular to a Member State and the specific types of production, production techniques and structures, as well as the internal market situation inherent to the supply and demand structure of each country. Nonetheless, the European policy of support and intervention in the agricultural branch, as well as the main trends of the agricultural markets in the European Union, can be traced in all Member States across the period as far as their influence on agricultural income is concerned.

Real net value added at factor cost per AWU, i.e. Indicator 1, had highly divergent average annual trends during "1981"/"1993" (cf. Table 5.1): Ireland (+4.3%) and Spain (+3.9%) had the sharpest increases. In contrast, Portugal (-1.9%), Italy (-1.2%) and the Netherlands (-0.1%) were the only countries to record an average annual fall in income in the European Union. It should be noted that in this chapter, Germany refers to its territorial situation as before 03.10.1990 for the period "1981"/"1991" and to Germany in its territorial situation after 03.10.1990 for the period "1991*"/"1994*"[1]. Income, in some cases, fluctuated sharply, as in Denmark, where the annual rate of increase moved from +6.2% from "1981" to "1984" to -1.5% from "1984" to "1987".

Table 5.1 Average annual percentage changes in Indicator 1 of agricultural income per Member State and for the European Union from "1981" to "1994*"

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12 (1)	EUR 12 (2)
"1981"/"1984"	3.4	6.2	-0.1	:	0.2	4.0	1.5	6.1	-0.9	4.8	3.1	0.2	0.4	1.3	:
"1984"/"1987"	-3.0	-1.5	2.0	:	1.4	2.1	0.3	2.0	-2.7	3.0	-0.8	-0.6	-2.7	-0.4	:
"1987"/"1993"	1.9	-0.6	3.2*	2.8**	2.7	4.7	3.4	4.5	-0.6	-0.5	-1.3	-3.5	2.9	2.5*	1.2**
"1981"/"1993"	1.0	0.8	1.9***	:	1.7	3.9	2.1	4.3	-1.2	1.6	-0.1	-1.9	0.9	1.2***	:

* "1987"/"1991" ** "1991*"/"1994*" *** "1981"/"1991"
(1) With Germany in its territorial situation before to 03.10.1990.
(2) With Germany in its territorial situation after 03.10.1990.

The Member States' share in final agricultural European Union production only changed slightly in the reference period. France occupied first place in "1993" with 22.2% of the whole European Union's final output (cf. Graph 5.1), followed by Italy (17.6%) and Germany (16.2%, the only notable change, as a result of the inclusion of the five new "Länder").

The development of final agricultural output in the European Union, which is characterized by a rise in volume (+1.2% per year on average) accompanied by an annual fall in real prices (-3.1% on average between "1981" and "1991"), can be found in all Member States to varying degrees (cf. Table 5.2). For example, whilst three countries recorded an annual increase averaging over +2.0% in their final output volume (Belgium, Ireland and the Netherlands), another five Member States (Germany, Luxembourg, Italy, the United Kingdom and Greece) recorded an increase of less than +1.0% per year, with the output volumes of the four other Member States (Portugal, Spain, France and Denmark) being close to the European Union average increase. Real

1 "1991*" = (1990+1991)/2 and "1994*" = (1993+1994)/2

prices fell relatively slightly in Greece (an average -1.9% per year). For the other Member States, the decline in real prices varied from between -2.1% per year on average to -4.1%, with the exception of Portugal, where it decreased an average -5.9% per year. These developments led to a decline in the real value of final output in all of the Member States, but especially in Portugal, Italy and Germany for where it was over -3.0% per year.

Graph 5.1 Member States' share (in values) of final agricultural output in "1993"

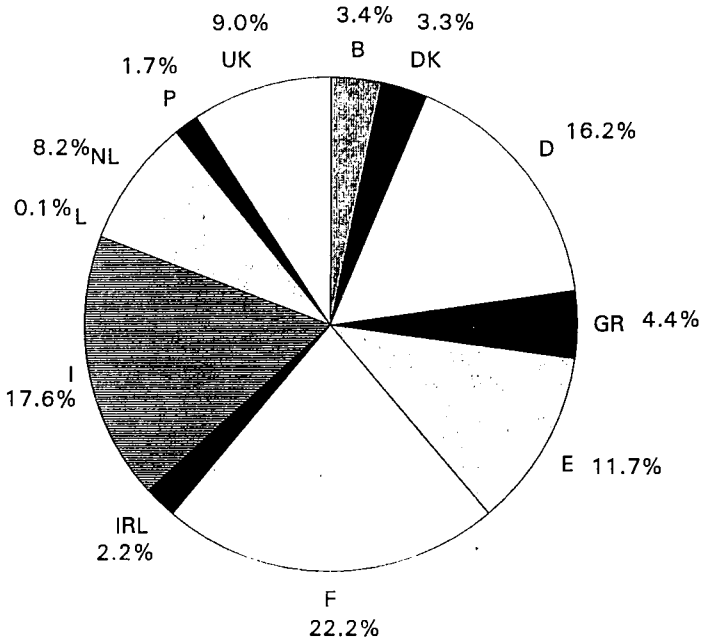


Table 5.2 Average annual rates of change in the real value of final output and intermediate consumption, in the productivity of intermediate consumption and in the "terms of trade"[2], from "1981" to "1994*", in %

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
Final production															
Volume	2.3	1.5	0.3*	-0.4**	0.6	1.3	1.3	2.2	0.5	0.4	2.2	1.1	0.5	1.2*	0.1**
Price	-3.0	-4.1	-3.5*	-7.5**	-1.9	-3.3	-3.5	-2.3	-3.8	-2.1	-2.3	-5.9	-2.9	-3.1*	-5.3**
Value	-0.8	-2.7	-3.2*	-7.9**	-1.2	-2.1	-2.3	-0.1	-3.3	-1.7	-0.1	-4.9	-2.4	-2.0*	-5.2**
Intermediate consumption															
Volume	2.3	0.5	-0.4*	-3.3**	1.4	1.3	0.9	2.0	0.6	2.3	1.3	-0.1	0.1	0.9*	-0.8**
Price	-2.9	-3.4	-3.3*	-3.3**	-1.4	-2.3	-2.3	-2.6	-4.2	-2.9	-2.1	-3.3	-2.1	-2.9*	-2.3**
Value	-0.7	-2.9	-3.7*	-6.6**	0.1	-1.0	-1.5	-0.6	-3.6	-0.7	-0.8	-3.3	-2.1	-2.0*	-3.1**
Productivity of intermediate consumption	0.0	1.0	0.8*	3.0**	-0.8	0.0	0.4	0.2	-0.1	-1.8	0.8	1.1	0.5	0.3*	0.9**
"Terms of trade"	-0.1	-0.7	-0.2*	-4.3**	-0.5	-1.1	-1.2	0.3	0.3	0.9	-0.1	-2.7	-0.8	0.3*	-2.9**

* "1981"/"1991" ** "1991*"/"1994*"

(1) With Germany in its territorial situation before to 03.10.1990.

(2) With Germany in its territorial situation after 03.10.1990.

[2] see para. 4.4.2 d. note 8

The average decline in the real value of output in EUR 12 (-2.0% per year) was partly offset by a fall in the real value of intermediate consumption of (-2.0% per year on average), with gross value added at market prices declining by an annual -1.9% on average in real terms. The increase in the use of intermediate consumption for the European Union was less steep in volume terms (+0.9% per year on average, with increases in all countries except Germany and Portugal) than for final output, thus resulting in a slight increase in the implicit productivity of intermediate consumption (+0.3% per year). This productivity was also positive in eight countries, but negative in Luxembourg, Greece and Italy. The fall in the average real price of intermediate consumption can be traced in all Member States (but to a lesser degree than for the average price of final output) and reached -2.9% per year on average for the European Union as a whole from "1981" to "1991". The "terms of trade" improved slightly, by an average of +0.3% per year for the European Union as a whole during "1981" to "1991".

The real value of intermediate consumption remained unchanged in Greece, fell slightly in four Member States (Ireland, Belgium, Luxembourg and the Netherlands) but more steeply in three others (Germany, Italy and Portugal).

The volume of total labour input in European Union agriculture decreased between "1981" and "1993" by an average rate of -3.0% per year (cf. Table 5.3). In Spain, the rate of fall in the labour input was especially high at -4.7% per year on average from "1981" to "1993", whereas it remained relatively small in the Netherlands (-0.5% per year on average). The decline in the volume of total agricultural labour input accelerated in the second part of the period, in most of the Member States, with the exceptions of Denmark, Luxembourg, the Netherlands, Portugal and Ireland.

Table 5.3 Average annual rates of change in the volume of total labour input in agriculture, in % for each Member State and for EUR 12

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR 12 (1)	EUR12 (2)
"1981"/"1984"	-1.4	-3.2	-2.7	:	-0.6	-3.8	-2.9	-2.6	-2.2	-4.6	-0.5	-3.8	-1.2	-2.6	:
"1984"/"1987"	-2.0	-3.8	-2.5	:	-2.1	-3.4	-3.5	-2.4	-2.3	-3.8	-0.9	-2.0	-1.7	-2.6	:
"1987"/"1993"	-2.8	-1.8	-4.4*	-12.0**	-3.5	-5.8	-4.3	-1.1	-3.4	-3.7	-0.4	-3.5	-2.0	-3.7*	-4.8**
"1981"/"1993"	-2.3	-2.6	-3.3***	:	-2.4	-4.7	-3.7	-1.8	-2.9	-3.9	-0.5	-3.2	-1.7	-3.0***	:

* "1987"/"1991" ** "1991*"/"1994*" *** "1981"/"1991"

(1) With Germany in its territorial situation before to 03.10.1990.

(2) With Germany in its territorial situation after 03.10.1990.

5.2 Belgium

In the period from "1981" to "1993", agricultural income in Belgium as measured by Indicator 1 grew at an average annual rate of +1.0%, slightly lower than the average for the European Union (+1.2% for both "1981" to "1991" and "1991*" to "1994*"). As in other Member States, three separate phases can be identified: an increase between 1980 and 1983, a levelling-off and decline from 1984 to 1987, and a slight recovery between 1988 and 1994. However, each of these phases was much more pronounced in Belgium than in the European Union as a whole. In the sub-period from "1981" to "1984", for example, agricultural income rose significantly (+3.4% per annum), helped by higher agricultural prices (+0.7% per annum in real terms for final output), which were attributable to a more favourable European Union policy and a slight fall in the value of the Belgian franc. In the sub-period from "1984" to "1987", agricultural income declined by an average of -3.0% per annum, as the average annual growth in final output volume (+2.6%) was insufficient to compensate for a particularly steep average decline in real prices (-5.6% per annum). The years from "1988" to "1993" were characterized by rising income (+1.9% per annum), although the trend was far from regular. In 1988 and 1989, income increased strongly, thanks above all to a recovery in agricultural prices (especially for cattle, pigs and milk), which were boosted by the reorganization of European Union agricultural markets as part of a more restrictive agricultural policy, and by improved conditions on world markets. The subsequent

years brought major declines in income, mainly because of unfavourable developments in pig farming and some sectors of crop output.

Over the period as a whole ("1981" to "1993"), real prices decreased by an average of -3.0% per annum. Increases in final output volume (+2.3% per annum), were above the average for the European Union. The value of animal output (most importantly pig, cattle and milk output) accounts for about two-thirds of the value of final agricultural output, with fresh vegetables being the biggest item of crop output.

Table 5.4 Average annual rates of change in the key items of the generation of income account for agriculture in Belgium from "1981" to "1993" (in %)

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**1.7**	**3.7**	**3.2**	**3.0**	**1.9**	**-4.9**	**-3.7**	**-2.6**	**3.6**	**-1.4**	**-0.5**	**0.3**
Cereals	4.9	1.7	0.1	1.7	-1.6	-6.3	-8.2	-6.1	3.2	-4.6	-8.1	-4.5
Potatoes	1.3	7.1	5.2	4.7	4.5	-15.4	1.9	-2.1	6.0	-9.3	7.2	2.5
Fresh vegetables	3.8	5.3	4.5	4.5	2.2	-5.2	-3.2	-2.4	6.1	-0.2	1.2	2.0
Final animal output	**1.4**	**1.9**	**2.2**	**1.9**	**0.2**	**-6.0**	**-3.5**	**-3.3**	**1.6**	**-4.2**	**-1.4**	**-1.4**
Cattle	4.1	1.3	2.3	2.5	-1.0	-6.2	-3.3	-3.4	3.1	-4.9	-1.0	-1.0
Pigs	0.1	4.8	3.9	3.1	-0.5	-9.3	-3.7	-4.4	-0.4	-4.9	0.0	-1.4
Milk	0.4	-0.5	-1.5	-0.8	1.5	-1.6	-2.7	-1.4	1.9	-2.1	-4.2	-2.2
Final output	**1.6**	**2.6**	**2.6**	**2.3**	**0.7**	**-5.6**	**-3.6**	**-3.0**	**2.3**	**-3.2**	**-1.1**	**-0.8**
Intermediate consumption	**1.0**	**3.4**	**2.5**	**2.3**	**1.4**	**-6.3**	**-3.4**	**-2.9**	**2.4**	**-3.1**	**-0.9**	**-0.7**
Gross value added at m.p.	**2.2**	**1.6**	**2.7**	**2.3**	**-0.1**	**-4.9**	**-3.8**	**-3.2**	**2.1**	**-3.4**	**-1.3**	**-1.0**
Subsidies									2.9	0.2	2.4	2.0
Taxes linked to production									23.5	31.0	-11.0	6.4
Depreciation									1.5	2.3	0.8	1.4
Net value added at f.c.									**2.0**	**-5.0**	**-0.9**	**-1.2**
Rent									-3.3	-1.0	-1.8	-2.0
Interest									3.5	-2.3	4.9	2.7
Net income of total labour									**2.1**	**-5.6**	**-2.0**	**-1.9**
Compensation of employees									4.3	3.5	3.4	3.6
Net income of family labour									**2.0**	**-6.3**	**-2.6**	**-2.4**

N.B.: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1993" P = "1981"/"1993"

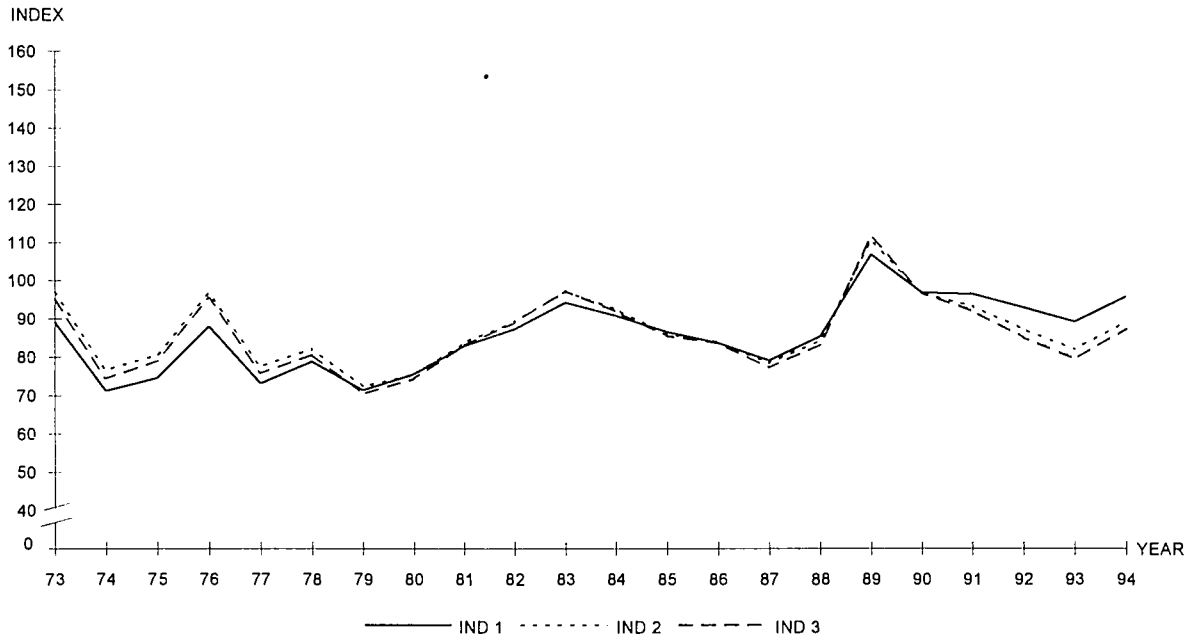
The growth in output volume was primarily attributable to a significant increase in crop output volume in the first two sub-periods (averaging +2.7% per year), when high average annual growth rates were recorded for cereals, potatoes and fresh vegetables (+3.3%, +4.2% and +4.5% respectively). An average annual increase of +2.2% in the real price of fresh vegetables in the sub-period "1981"/"1984" gave way to steep declines in the sub-period "1984"/"1993" (averaging -3.9% per annum), despite a significant increase in 1990. The real value of fresh vegetable output rose over the reference period by +2.0% per annum on average, although this figure too conceals wide annual variations.

Following a period of very modest changes in the volume of pig output (an average +0.1% per annum between "1981" and "1984"), volume rose strongly in the rest of the reference period (an average +4.2% per annum between "1984" and "1993"), despite a collapse in output volume in 1990 (-13%) caused by swine fever, which necessitated slaughtering on a massive scale. Real prices fell between "1981" and "1993" (an average -4.4% per annum), with especially steep declines between "1984" and "1987" (averaging -9.3% per annum). The volume of milk output was fairly constant between 1980 and 1987, but declined from 1988 onwards, resulting in an average annual decline of -0.8% over the entire reference period. Real prices for milk fell slightly between "1981" and "1993" (-1.4% per annum on average). Real prices did in fact increase in 1988 and 1989 in the wake of improved market conditions (lower output and a reduction in excess supply), but these increases were quickly cancelled out by declines in 1990 and 1991. Average annual growth in the volume of cattle output was just +1.3% between "1984" and "1987" in the wake of the introduction of milk quotas, but was +2.5% over the reference period as a whole. Real prices for cattle declined by an average of

-3.4% per annum between "1981" and "1993", depressed by a large excess of supply and flat or falling demand.

Together with Luxembourg, Belgium recorded the highest average annual increase in the volume of intermediate consumption used (+2.3%). This was mainly the result of higher consumption in the animal production sector. With the volume of final output increasing at the same rate as the volume of intermediate consumption, the latter's productivity remained unchanged over the reference period (±0.0%). The real prices of intermediate consumption fell by an annual average of -2.9%, and the nominal price changes led to a slight improvement of +0.1% per year in the "terms of trade".

Graph 5.2 Development in the three indicators of agricultural income in Belgium between 1973 and 1994, with "1990" = 100



The share of the value of intermediate consumption in that of final output is relatively large (59% compared to about 45% for EUR 12). This large share appears to compensate for a relatively low level of investment, which can be seen from the fairly small share of the value of depreciation in that of final output (about 8%, compared with 14% for the European Union as a whole). The average annual increase in depreciation was +1.4% in real terms. Interest payments rose by an average +2.7% per annum in real terms. The share of the value of subsidies in final output was more or less stable until the beginning of the 1990s, except in 1990 when compensation was paid for the massive slaughtering required because of swine fever. Following the reform of the CAP, the share of subsidies rose somewhat (to about 4%), but was still small compared with the European Union as a whole (about 11%). Taxes linked to production rose steadily and considerably between "1981" and "1987" (an average +27.2% per year in real terms), but declined by an average -11.0% per year in real terms in the last sub-period (partly as a result of the abolition of the co-responsibility levy for milk and cereals). The share of net income of total labour in final output (about 28%) is smaller than in the other Member States (EUR 12: about 39%). Net income of total labour declined over the reference period by -1.9% per annum on average. The volume of total agricultural labour input fell slightly between "1981" and "1984" (an average -1.4% per annum) and then more steeply between "1984" and "1993" (averaging -2.5% per annum).

Indicators 2 and 3, which take account of interest, rents and the compensation of employees, displayed similar trends to Indicator 1 (an average +0.3% and +0.2% per annum respectively).

5.3 Denmark

The growth in agricultural income in Denmark, measured at +0.8% per annum by Indicator 1, was only slightly lower than the European Union average during the period under review (+1.2% per year on average for both the periods "1981" to "1991" and "1991*" to "1994*"). However, this figure does conceal very large annual fluctuations (as shown in Graph 5.3). Nevertheless, when these income changes are averaged over three defined sub-periods, some clear and contrasting trends can be distinguished; agricultural income showed sustained growth only in the first half of the 1980s (+6.2% per annum from "1981" to "1984") with average declines in the rest of the period under review (-1.5% per annum from "1984" to "1987" and -0.6% per annum from "1987" to "1993").

Table 5.5 Average annual rates of change in the key items of the generation of income account for agriculture in Denmark from "1981" to "1993", in % terms

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**5.8**	**3.5**	**0.2**	**2.4**	**-2.8**	**-6.0**	**-4.7**	**-4.6**	**2.8**	**-2.7**	**-4.6**	**-2.3**
Cereals	3.9	2.3	1.0	2.1	-4.1	-8.2	-5.7	-5.9	-0.4	-6.1	-4.7	-4.0
Final animal output	**1.5**	**0.0**	**1.6**	**1.2**	**-1.5**	**-6.0**	**-4.1**	**-3.9**	**0.0**	**-6.0**	**-2.6**	**-2.8**
Cattle	-0.6	-4.3	-0.5	-1.5	-1.9	-6.7	-4.0	-4.2	-2.4	-10.8	-4.5	-5.6
Pigs	2.3	3.0	4.5	3.6	-2.4	-9.3	-4.7	-5.3	-0.1	-6.6	-0.4	-1.9
Milk	0.9	-2.7	-1.0	-0.9	-0.8	-1.8	-2.5	-1.9	0.0	-4.4	-3.5	-2.8
Final output	**2.6**	**1.0**	**1.2**	**1.5**	**-1.8**	**-6.0**	**-4.3**	**-4.1**	**0.8**	**-5.0**	**-3.2**	**-2.7**
Intermediate consumption	**0.7**	**-0.3**	**0.8**	**0.5**	**-0.8**	**-6.3**	**-3.2**	**-3.4**	**-0.1**	**-6.6**	**-2.4**	**-2.9**
Gross value added at m.p.	**4.9**	**2.3**	**1.6**	**2.6**	**-2.9**	**-5.5**	**-5.5**	**-4.8**	**1.8**	**-3.3**	**-4.0**	**-2.4**
Subsidies									3.7	-12.2	24.4	9.0
Taxes linked to production									-11.3	8.8	-6.1	-3.9
Depreciation									1.4	-1.2	-1.6	-0.7
Net value added at f.c.									**3.0**	**-5.1**	**-2.5**	**-1.8**
Rent									7.3	-1.4	-1.7	0.6
Interest									-5.6	-2.3	1.1	-1.5
Net income of total labour									**12.7**	**-7.9**	**-7.0**	**-2.7**
Compensation of employees									1.3	-1.5	-3.2	-1.7
Net income of family labour									**20.6**	**-11.4**	**-10.1**	**-3.6**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1993" P = "1981"/"1993"

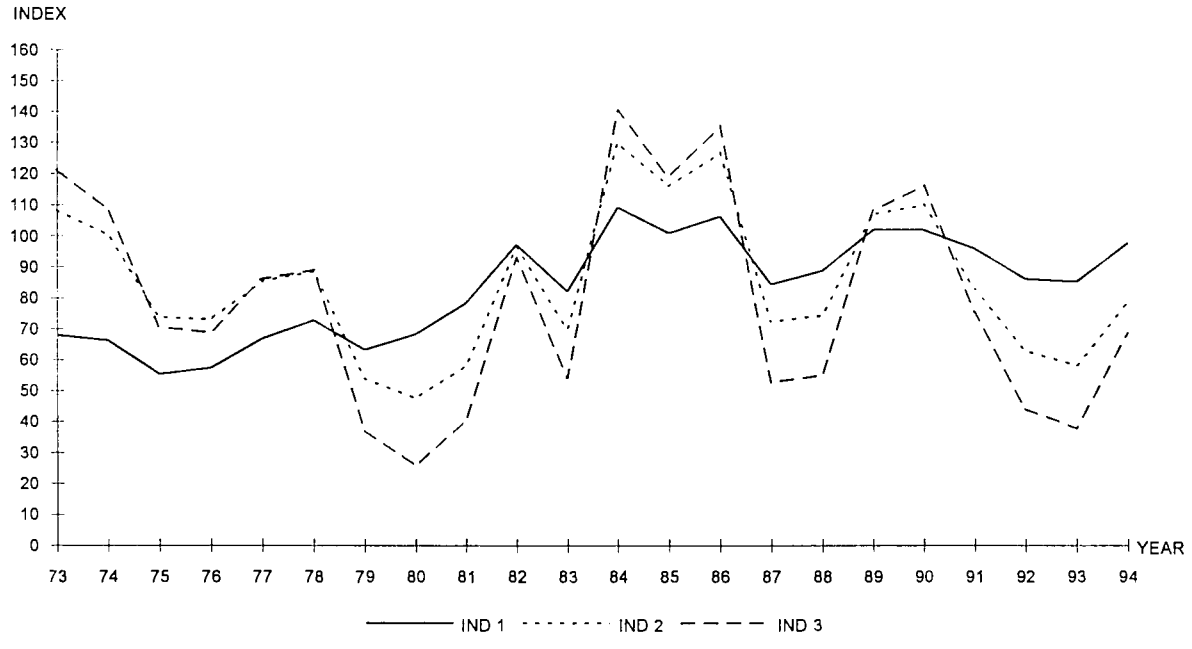
This fluctuation in agricultural income, which gives rise to a certain vulnerability in Danish agriculture, can be explained by the low proportion of final output accounted for by net income. It is therefore very susceptible to slight variations in volume and price, particularly if measured by Indicators 2 and 3. The value of intermediate consumption represents about half (51%) that of final output, compared with an average of about 45% for the European Union as a whole. The difference reflects the considerable intensification of the agricultural production process in Denmark and the importance of animal production. Likewise, the major investments which have been made in the agricultural sector represent a considerable burden on accounts, since financial charges have risen to about 20% of final output compared with 6% for the European Union. Finally, this accumulation of expense explains why the net income from agricultural activity of total labour, the basis of Indicator 2, is only a small part (16%) of final output in the agricultural branch, compared with about 40% for the European Union as a whole (the corresponding figures obtained using the basis of Indicator 3 are about 10% and 29% respectively). Despite there being a small average annual increase in the level of Indicator 1, agricultural income as measured by Indicators 2 and 3 decreased very slightly, by an average -0.1% and -0.4% per year respectively during the period under review. These falls were aggravated by an increase in rental payments (+0.6% per year in real terms) and even by the average rates of decline for interest payments and the compensation of employees (-1.5% and -1.7% per annum in real terms), since these were less than the average decline in gross value added at market prices (-2.4% per year in real terms). These changes in the Income Indicators occurred against a background of a considerable reduction in the volume of

agricultural labour input throughout the period (-2.6% per annum for the total labour input and -3.3% per year for family labour input).

The volume of final output increased moderately between "1981" and "1984" (an average +2.6% per annum) and was then followed by a period of slower growth (an average +1.1% per annum between "1984" and "1993"). This was due, in particular, to the slowdown in the annual rate of increase of crop output volume (from +5.8% in "1981"/"1984", progressively down to +0.2% in "1987"/"1993") despite representing only a third of final output. The volume of final animal output recovered the rate of growth experienced in "1981"/"1984" (+1.5% per year) in the final sub-period, having dipped in between. Over the period as a whole, real prices for final output decreased sharply (particularly after 1984) at an average rate of -4.1% per annum, which was only partly compensated for by an increase in output volume (+1.5% per annum). The net result was a fall in the real value of final output (-2.7% per annum on average).

The mainstay of agricultural output in Denmark is animal output (particularly from pig and milk production), the value of which represents just over two thirds of that of final output. Production is highly concentrated, with the average number of animals per holding being much higher than in the European Union as a whole. Denmark has a pigmeat and milk self-sufficiency rate of more than 200%. The volume of pig output rose by an average +3.6% per annum over the entire period, with the annual increases being particularly high in the last sub-period (+4.5% per year). In this same sub-period ("1987" to "1993") the decline in real prices (averaging -4.7% per year) closely reflected this rise in volume, so that the real value of output remained relatively stable (averaging -0.4% per year). The same pattern can be observed for the sub-period "1981" to "1984" (real value -0.1% per annum). However, as a result of real prices plummeting by -9.3% between "1984" and "1987", the real value of pig output decreased by an average -1.9% per year over the whole period. Following a period of relatively weak growth from 1980 to 1983, the volume of milk output fell more strongly (an average -1.6% per annum) from "1984" to "1993" owing to the introduction of milk quotas.

Graph 5.3 **Development of the three indicators of agricultural income in Denmark between 1973 and 1994, with "1990" = 100**



The volume of crop output increased by an average +2.4% per annum over the entire period, particularly due to cereals (+2.1%) and flowers (+3.6%). The real price of final crop output declined steadily and considerably throughout the period (-4.6% per annum), although this followed the pattern observed in most other Member States.

Intermediate consumption volume rose only slightly throughout the period "1981"/"1993" (averaging +0.5% per annum). This was in stark contrast to the 1970s, which witnessed a marked intensification of production. With the volume of final output rising by an average +1.5% per year, the productivity of intermediate consumption increased by an average +1.0% per annum. However, the fall in the price of intermediate consumption (an average -3.4% per year in real terms) was not as steep as the fall in the price of final output (-4.1% per annum in real terms on average). This led to a deterioration in the "terms of trade" (-0.7% per year on average).

Changing policy instruments linked to the development of the CAP have greatly altered the amount of subsidies and taxes linked to production, even when considered over the long-term. There had been a national policy of reducing production subsidies, particularly in the period before 1992. However, the reform of the CAP, with a considerable rise in subsidies, most notably for cereals during 1993 and 1994, resulted in an "average" annual rate of increase of +9.0% in real terms over the entire period. This was also reflected in the proportion of the value of final agricultural output accounted for by subsidies, which had fallen from 1.7% in 1981 to 0.9% in 1991, but rose spectacularly to 9.7% in 1994. Taxes linked to production fell over the reference period (an average -3.9% per annum in real terms) to provide a double-edged impetus to incomes.

5.4 Germany

This year, for the first time, the analysis of long-term trends examines Germany in its territorial boundaries as after 3 October 1990. However, there is only limited scope for comparing the data for Germany in the last sub-period and the entire reference period, with the data for the other Member States. This is because the reference periods from 1991 onwards are different (a result of the changes which took place in 1990), and also because the data for Germany in its territorial situation as after 1991 include extremely different structures and trends for the "old" and new "Länder".

The three phases which can generally be identified for the rest of the European Union do not apply in the case of Germany. The 1980s were characterized by wide fluctuations in income, with an average annual decline of -0.1% from "1981" to "1984" and an average increase of +2.0% per annum between "1984" and "1987". In 1988 and 1989, a further increase was recorded, against a background of a general improvement at European Union level, and Indicator 1 rose by +3.2% per annum in the years between "1987" and "1991". However, the Indicator 1 rose by +2.8% per annum on average between "1991*" and "1994*" (the period with Germany in its territorial boundaries as after 03.10.1990). Trends in agricultural income are determined above all by real net value added at factor cost and the volume of agricultural labour input. The former declined by -1.5% per annum on average between "1981" and "1991", and plummeted by -9.9% per annum between "1991*" and "1994*". The volume of total agricultural labour input contracted by -3.3% per annum on average between "1981" and "1991" and by an average of -12.0% per annum between "1991*" and "1994*".

Real producer prices for final output fell by an average annual -3.5% between "1981" and "1991" and by -7.5% between "1991*" and "1994*". The average growth of final output volume between "1981" and "1991" (+0.3% per annum) was relatively small. Between "1991*" and "1994*", the average annual decline in output volume was -0.4%. This was mainly attributable to a big fall in the volume of animal output (averaging -2.4% per year). In the crop production sector, by contrast, the output volume increased over the reference period, rising by an annual average of +1.4% between "1981" and "1991" and +2.8% between "1991*" and "1994*".

The volume of cereal output rose by +2.3% per annum on average between "1981" and "1991", but declined by -2.6% per annum on average between "1991*" and "1994*". Real producer prices fell over the reference period (by an annual average of -5.5% between "1981" and "1991" and -10.8% between "1991*" and "1994*").

The volume of fresh fruit output rose by an average of +1.9% per annum between "1981" and "1987". A decrease in the sub-period "1987"-"1991" of -2.9% per annum, however, meant that output volume was unchanged between "1981" and "1991" (±0.0%). Between "1991*" and "1994*", robust growth of +15.5% per annum was recorded. Real producer prices declined by an annual average of -7.0% between "1981" and "1991", dragged down by average annual falls of -15.0% in the last sub-period. Between "1991*" and "1994*", the average annual rate of decline reached -16.7%.

Table 5.6 Average annual rates of change in the key items of the generation of income account for agriculture in Germany from "1981" to "1994*" (in %)

	Volume					Real price					Real value				
	SSP1	SSP2	SSP3	P (1)	P (2)	SSP1	SSP2	SSP3	P (1)	P (2)	SSP1	SSP2	SSP3	P (1)	P (2)
Final crop output	0.5	1.5	2.0	1.4	2.8	-2.4	-4.6	-2.7	-3.2	-9.5	-1.9	-3.2	-0.7	-1.8	-7.0
Cereals	2.3	1.8	2.6	2.3	-2.6	-4.0	-6.2	-6.2	-5.5	-10.8	-1.8	-4.5	-3.8	-3.4	-13.1
Fresh fruit	1.5	2.4	-2.9	0.0	15.5	1.4	-3.8	-15.0	-7.0	-16.7	2.9	-1.5	-17.4	-7.0	-3.8
Final animal output	1.2	-0.7	-1.0	-0.3	-2.4	-2.7	-5.8	-2.8	-3.7	-6.1	-1.6	-6.5	-3.7	-3.9	-8.4
Cattle	1.4	0.0	0.3	0.5	-6.5	-3.0	-7.0	-5.5	-5.2	-2.1	-1.6	-7.0	-5.2	-4.7	-8.5
Pigs	0.9	0.8	-1.2	0.0	-1.7	-4.4	-10.4	0.1	-4.5	-10.9	-3.6	-9.7	-1.1	-4.5	-12.4
Milk	1.5	-2.3	-2.1	-1.1	-1.2	-0.8	-2.2	-2.8	-2.0	-5.2	0.6	-4.5	-4.8	-3.1	-6.4
Final output	0.9	0.0	0.1	0.3	-0.4	-2.6	-5.4	-2.8	-3.5	-7.5	-1.7	-5.4	-2.6	-3.2	-7.9
Intermediate consumption	0.3	-0.5	-0.9	-0.4	-3.3	-0.9	-6.6	-2.6	-3.3	-3.3	-0.7	-7.1	-3.5	-3.7	-6.6
Gross value added at m.p.	1.8	0.7	1.2	1.2	2.4	-4.7	-3.9	-2.9	-3.7	-11.5	-3.0	-3.3	-1.7	-2.6	-9.4
Subsidies											18.3	18.9	2.2	11.7	1.2
Taxes linked to production											2.7	4.2	-6.5	-0.6	-14.5
Depreciation											0.2	-1.7	0.1	-0.4	-0.8
Net value added at f.c.											-2.8	-0.5	-1.3	-1.5	-9.9
Rent											3.0	3.0	4.2	3.5	-0.7
Interest											0.6	-3.5	-4.1	-2.5	-0.3
Net income of total labour											-4.1	0.1	-1.1	-1.7	-12.7
Compensation of employees											-0.7	-0.8	-1.5	-1.1	:
Net income of family labour											-5.0	0.4	-1.0	-1.8	:

N.B.: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1993" P = "1981"/"1993"
SSP4 = "1991*"/"1994*", where "1991*" = (1990 + 1991)/2 and "1994*" = (1993+1994)/2

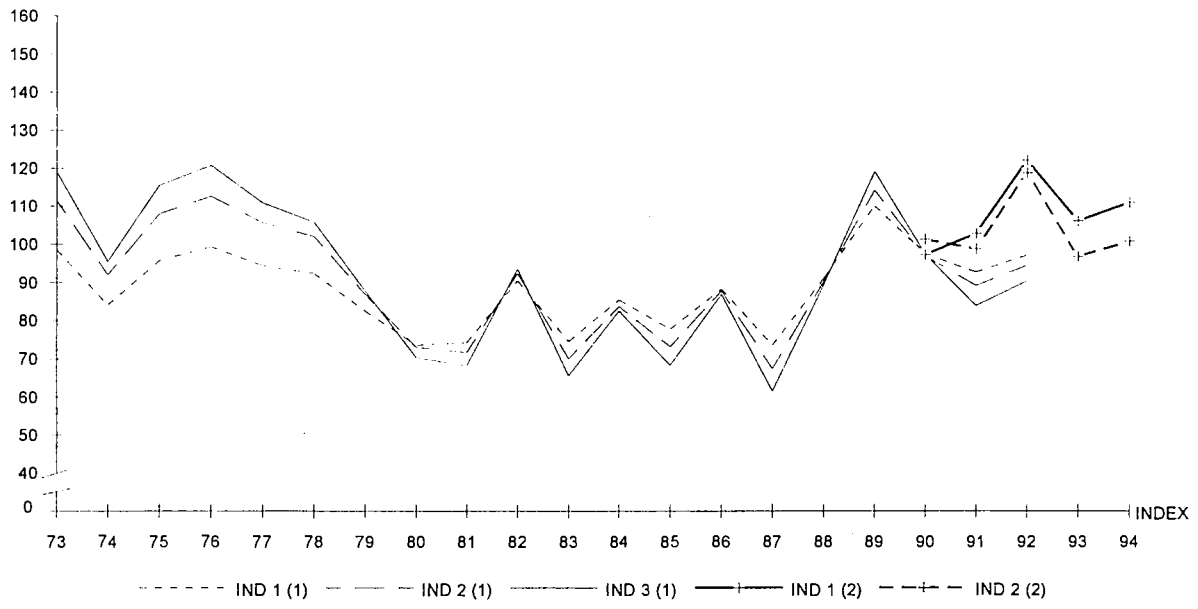
The volume of cattle output rose by an average +0.5% per annum between "1981" and "1991". Following annual increases averaging +1.4% in the early 1980s, the introduction of milk quotas caused output volumes to come to a standstill. The immediate effect was an increase in cow slaughterings and a decline in the size of the herd. Not until 1990 and 1991 did output recover somewhat. In the sub-period "1991*" to "1994*", the volume of cattle output went down by -6.5% per annum on average, mainly as a result of the drastic reduction of the herd in the new "Länder". The volume of milk output in Germany, as in most other Member States, went into decline after 1984 following the introduction of milk quotas (averaging -2.2% per annum between "1984" and "1991"). The average rate of decline over the period from "1981" to "1991" was -1.1%. There was a similar rate of contraction (averaging -1.2% per year) between "1991*" and "1994*". Real producer prices for both cattle and milk declined over each of the sub-periods: the average annual falls in the case of cattle were -5.2% between "1981" and "1991" and -2.1% between "1991*" and "1994*", while real producer prices for milk fell by -2.0% between "1981" and "1991" and -5.2% between "1991*" and "1994*".

The volume of pig output was unchanged over the period from "1981" to "1991" as a whole, with increases in the first two sub-periods ("1981" to "1987") being cancelled out by declines between "1987" and "1991". In the period from "1991*" to "1994*", output fell by -1.7% per annum on average. Real producer prices decreased by -4.5% per annum on average over the period from "1981" to "1991", despite a slight recovery (+0.1% per annum) between "1987" and "1991". After "1991*", real prices slid dramatically (-10.9% per annum on average).

The volume of intermediate consumption used went down by -0.4% per annum on average between "1981" and "1991" and by -3.3% per annum between "1991*" and "1994*" (Portugal was the only other Member State to record a decline over the reference period as a whole). The reason for this decline can be seen in the lower output volumes for final animal output (62% of final output), particularly for cattle. Nevertheless, the share of intermediate consumption in final output is still relatively high (the EU average being about 45%). The fall in the use of intermediate consumption, combined with the trend in final agricultural output, meant that the productivity of intermediate consumption rose by +0.8% per annum on average between "1981" and "1991". However, over the same period, the "terms of trade" deteriorated by -0.2% per annum on average. Over the period from "1991*" to "1994*", the productivity of intermediate consumption rose by +3.0% per annum on average, and the "terms of trade" deteriorated by a substantial -4.3% per year on average.

The real value of depreciation fell by annual average of -0.4% between "1981" and "1991" and -0.8% between "1991*" and "1994*". The share of depreciation in final output, however, rose above 20% (For Germany in its territorial boundaries after 03.10.1990 this share was 24%, compared with about 14% for EUR 12), a figure which reflects the capital intensiveness of German agriculture. Taxes linked to production edged down slightly (-0.6% per annum on average in real terms) between "1981" and "1991", before plummeting by -14.5% per annum in real terms in the ensuing sub-period. Real subsidies rose considerably (+11.7% per annum on average) between "1981" and "1991", boosted by compensatory payments following the abolition of the monetary compensatory amounts in 1984, and by subsidies for milk quotas and set-aside in the second half of the 1980s. They then increased by +1.2% per annum in real terms between "1991*" and "1994*". The effect of this was that subsidies grew to represent nearly 17% of the value of final agricultural output, the second-highest share in the European Union after Greece. Interest payments fell by annual averages of -2.5% in real terms between "1981" and "1991", and -0.3% thereafter. Rents rose by +3.5% per annum in real terms between "1981" and "1991" but fell back by -0.7% per annum in real terms between "1991*" and "1994*". The contraction of the volume of agricultural labour input accelerated towards the end of the reference period, from -2.6% per annum on average between "1981" and "1987" to -4.4% per annum between "1987" and "1991". After "1991*", the rate of contraction in Germany in its territorial situation as after 03.10.1990 accelerated to an average -6.1% per year, reflecting the extent to which labour was being shed in the new "Länder".

Graph 5.4 Development in the three indicators of agricultural income in Germany between 1973 and 1994, with "1990" = 100 (with the exception of (2))



The changes in Indicators 2 and 3 were similar to those of Indicator 1. Between "1981" and "1984", Indicators 2 and 3 showed average annual declines of -1.4% and -2.3% respectively, but significant increases (+3.1% and +3.3% respectively) were notched up between "1984" and "1991". Over the period from "1981" to "1991", the average annual increases were +1.4% for Indicator 2 and +1.3% for Indicator 3.

In the period "1991*" to "1994*", Indicator 2 declined slightly by an average -0.4% per annum. The corresponding trend in Indicator 3 is not be given here because the distinction between family workers and dependent employees in the new "Länder" is not particularly clear.[3]

[3] cf Chapter 3.3

5.5 Greece

Agricultural income in Greece, measured by Indicator 1, grew by an average +1.7% per annum, which is above the European Union averages. The various phases in agricultural income movements identified for the European Union as a whole were less obvious in Greece, where income rose increasingly through the sub-periods, from an average rate of +0.2% per annum between "1981" and "1984" to +2.7% per annum for "1987" to "1993". Fostering this accelerated increase in agricultural income was the reduction in the agricultural labour input, which was relatively slight from 1980 to 1985 (averaging -0.5% per annum), but then accelerated, resulting in an overall decline of -2.4% per annum on average in the period under review.

Table 5.7 Average annual rates of change in the key items of the generation of income account for agriculture in Greece from "1981" to "1993", in % terms

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**0.7**	**1.4**	**0.8**	**0.9**	**0.2**	**-2.0**	**-2.5**	**-1.7**	**0.9**	**-0.7**	**-1.8**	**-0.8**
Cereals	-4.2	6.4	0.9	0.9	-1.0	-5.9	-6.8	-5.2	-5.2	0.1	-6.0	-4.3
Fibre plants	9.8	12.3	6.5	8.8	6.6	-6.3	-1.6	-0.8	17.1	5.2	4.8	7.9
Fresh vegetables	1.8	-1.2	-1.0	-0.4	3.7	-1.1	1.4	1.3	5.6	-2.3	0.4	1.0
Fresh fruit	1.7	-2.2	-0.4	-0.3	-1.6	-0.3	-4.5	-2.8	0.1	-2.5	-4.9	-3.1
Olive oil	-2.3	2.7	2.1	1.1	1.5	-1.8	-3.0	-1.6	-0.8	0.8	-1.0	-0.5
Final animal output	**-0.7**	**0.5**	**0.2**	**0.1**	**-1.2**	**-1.7**	**-2.7**	**-2.1**	**-1.9**	**-1.2**	**-2.5**	**-2.0**
Cattle	-4.0	-1.6	-1.5	-2.2	-1.5	-3.3	-3.1	-2.7	-5.5	-4.8	-4.5	-4.8
Pigs	-1.1	1.2	-0.4	-0.2	-1.8	-3.8	-4.4	-3.6	-2.9	-2.6	-4.8	-3.8
Sheep and goats	1.1	1.1	-0.2	0.5	-2.5	-3.4	-5.6	-4.3	-1.4	-2.3	-5.8	-3.8
Poultry	-4.4	1.4	3.9	1.1	-2.1	1.8	-3.5	-1.9	-6.4	3.2	0.2	-0.8
Milk	0.4	0.4	0.6	0.5	0.5	0.3	0.2	0.3	0.9	0.7	0.9	0.8
Final output	**0.2**	**1.1**	**0.6**	**0.6**	**-0.3**	**-1.9**	**-2.6**	**-1.9**	**-0.1**	**-0.9**	**-2.0**	**-1.2**
Intermediate consumption	**2.1**	**-0.1**	**1.9**	**1.4**	**-0.6**	**-1.3**	**-1.8**	**-1.4**	**1.5**	**-1.4**	**0.1**	**0.1**
Gross value added at m.p.	**-0.3**	**1.4**	**0.2**	**0.4**	**-0.2**	**-2.1**	**-2.9**	**-2.0**	**-0.5**	**-0.7**	**-2.7**	**-1.6**
Subsidies									4.4	5.1	13.1	8.9
Taxes linked to production									-0.8	9.7	1.5	2.9
Depreciation									2.6	1.8	-2.4	-0.1
Net value added at f.c.									**-0.4**	**-0.7**	**-0.9**	**-0.7**
Rent									8.6	-4.4	-5.2	-1.7
Interest									8.0	1.4	2.8	3.7
Net income of total labour									**-1.2**	**-0.6**	**-1.0**	**-0.9**
Compensation of employees									-3.0	-2.2	-0.9	-1.8
Net income of family labour									**-1.1**	**-0.5**	**-1.0**	**-0.9**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1993" P = "1981"/"1993"

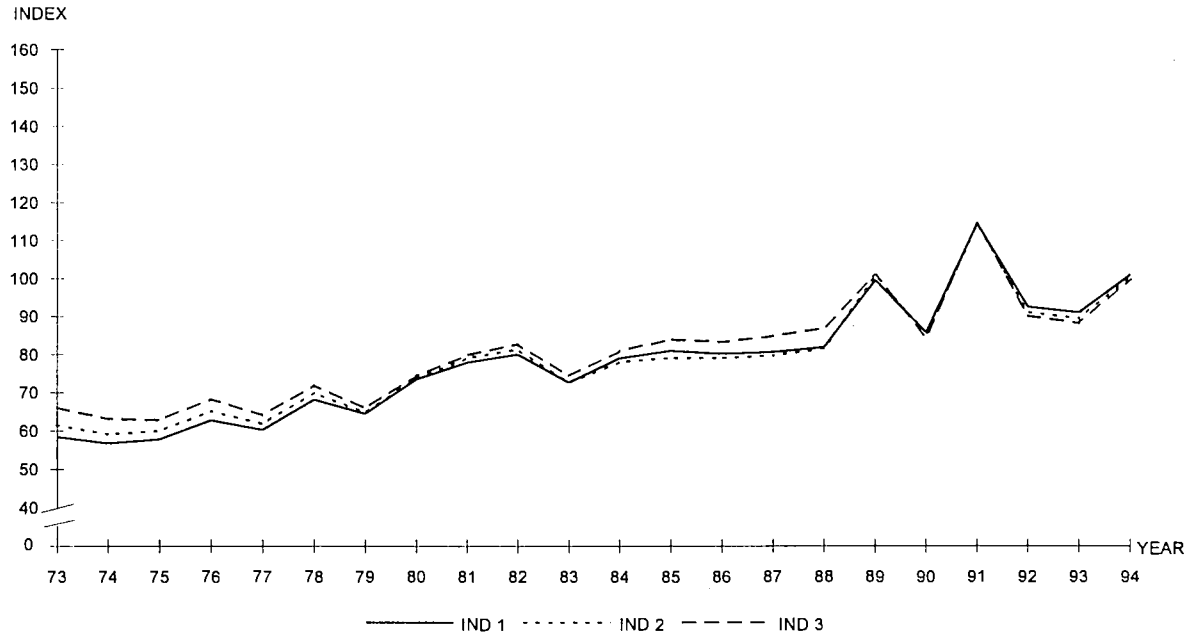
Final agricultural output grew in volume terms between "1981" and "1993" at an average annual rate of +0.6%, a little bit less than the European Union average. This rate represents a definite break with the 1970s, which were marked by substantial increases. This lower rate of growth was partly compensated for by the limited fall in real producer prices (averaging -1.9% per annum compared with -3.1% for EUR 12 in the period from "1981" to "1991" and then -5.3% until "1994*").

Agricultural output is dominated by crop output (fresh fruit and vegetables, textiles, olive oil, tobacco and cereals), the output value of which represents about 70% of that of final output. The volume of crop output grew at an average annual rate of +0.9% between "1981" and "1993" but with real prices declining by -1.7% per year on average, well under the European Union average, the real value decreased by -0.8% per year on average. A similar pattern was observed for animal output (the main products being sheep/goats and milk), where the very small rise in output (+0.1% per annum) was outweighed by increasingly stronger declines in real prices (-2.1% on average over the whole period), especially for sheep and goats, so that the real value of animal output decreased by an average -2.0% per year.

The output volume of fresh vegetables and of fresh fruit[4] declined very slightly when viewed as average annual changes (-0.4% and -0.3% respectively over the whole period), although these figures conceal wide annual fluctuations brought about by varying weather conditions and the nature of output. However, the movements in the real prices of these products over the period as a whole were quite contrasting. On the one hand, the real price of fresh vegetables increased by an average +1.3% per annum, which comprised considerable rises between "1981" and "1984" (averaging +3.7% per year) being dampened by falls from "1984" to "1987". On the other, the real price of fresh fruit fell steadily (-2.8% per annum on average), but particularly strongly in the period after "1987" (an average -4.5% per year) The volume of olive oil produced rose by +2.3% per year on average in the period after "1984" after declining by an average -2.3% per year in the period "1981"/"1984". Reflecting the changes in output volume, real producer prices rose during "1981" to "1984" by +1.5% per year on average but then declined by an average -2.6% per annum, particularly following the fall in the support price, in the "1987"/"1993" period.

The volume of industrial crop output soared, because of the strong growth in textile crop output volume (an annual average of +8.8%). The growth in output volume was particularly strong in the second sub-period (+12.3% in "1984"/"1987") when compared to the average of the third sub-period (+6.5% per year in "1987"/"1993"). This slow-down can be attributed almost entirely to the pattern of growth in cotton output, which slowed down considerably as a result of the introduction of the maximum guaranteed quantity, the fall in the target price and European Union assistance triggered by the stabilizer mechanism with effect from the 1987/1988 season. Despite the volume increases, producer prices for textile plants declined relatively little (an average -0.8% in real terms per annum). The reform of the EU tobacco market with effect from the 1993 harvest onwards, severely curtailed output, which is slightly reflected in the output volume figures for the last sub-period (-1.6% per year on average against +5.4% per year between "1984" and "1987"). The fall in institutional prices, brought about by the stabilizer mechanism affecting the various varieties of tobacco, combined with very high levels of intervention stocks from 1985 onwards, contributed to an average annual decline in the real price of -2.9% between "1984" and "1993".

Graph 5.5 Development of the three indicators of agricultural income in Greece between 1973 and 1994, with "1990" = 100



The volume of sheep and goat output grew by an annual rate of +0.5% between "1981" and "1993". This rate of growth must be seen in the light of the continuous increase in consumption and of the common

4 Including citrus fruit and table grapes.

organization of the market in these products, as the system of ewe premiums favoured growth in the sector for most of the period. The restrictive policy of institutional prices did, however, cap output in the period from "1987" to "1993", when it remained relatively stable (-0.2% per year on average against +1.1% per year between "1981" to "1987"). Milk output volume grew slowly but steadily over the period (+0.5% per annum), as did real prices (+0.3% per annum).

The use of intermediate consumption grew at a relatively fast rate (an annual average of +1.4%) from a low level, as reflected through the absolute value which is only about 23% of the value of final output compared to a European Union average of about 45%. This increase was due mainly to the increases in the consumption of energy (an average +4.6% per year) and plant protection products (+6.9% per year on average). Both the "terms of trade" and the productivity of intermediate consumption deteriorated moderately over the period "1981"/"1993" (an average -0.5% and -0.8% per year respectively). The lower level of production intensiveness is reflected in capital utilization. The level of depreciation is much lower than in the European Union as a whole (4.5% of total output, compared with 14% for the European Union) and remained almost unchanged in the period under review (-0.1% per annum in real terms on average). Subsidies, which started from a relatively high base, rose by an average +8.9% per year in real terms, although taxes linked to production also rose slightly (+2.9% per year in real terms after particularly large increases in "1984"/"1987" at +9.7% per annum). Net agricultural income of total labour, the basis for Indicator 2, represents nearly 70% of the value of final output (compared with 39% for EUR 12) and is therefore less susceptible to variations in price and output volumes.

Indicators 2 and 3 of agricultural income, which take account of interest (averaging +3.7% per annum in real terms), rent (-1.7% per year in real terms on average) and compensation of employees (-1.8% per year in real terms), rose broadly in line with Indicator 1 (+1.5% and +1.3% per annum respectively).

5.6 Spain

As measured by Indicator 1, Spain had one of the steepest rises in agricultural income of all the Member States (by an average of +3.9% per annum during the entire reference period); the upward trend was particularly marked from "1981" to "1984" (an average +4.0% per annum) and from "1987" to "1993" (+4.7% per year). This development, differing from that in the other Member States, is mainly due to the accession of Spain to the European Union in 1986 and by certain specific features of Spanish agricultural production. The income improvement per AWU is explained by the fact that the decline in real net value added at factor cost was fairly small (averaging -1.1% per annum) and more than offset by the large reduction in the volume of total agricultural labour input (at an average -4.7% per year, the highest rate in EUR 12).

Crop output in Spain accounts for virtually 58% of the value of final agricultural output. The main products are fresh vegetables, fresh fruit, cereals, pigs, and to a lesser degree milk and cattle. The modernization process which has been going on in Spain led to a clear rise in final output volume (at an average +1.3% per annum, slightly above the EU average), with a simultaneous decline in real producer prices (at -3.3% per annum in real terms for final output, this being slightly more than the EU average), but on the other hand, increased use of intermediate consumption (+1.3% per annum) and capital assets (with a clear downward trend at the end of the overall reporting period).

The volume of fresh vegetables output rose steadily, by an average of +1.3% per year over the entire reporting period ("1981"/"1993"), this being due to larger areas under cultivation and higher yields. Annual fluctuations were high but real prices declined only slightly in the period "1981" to "1987" (-0.8% per annum). There was a greater rise in the volume of fresh fruit output than for fresh vegetables. Although there were strong short-term fluctuations, the volume of fresh fruit increased virtually continuously over the entire period (+2.7% per annum between "1981" and "1993") as a result of the larger area under cultivation and improved productivity; this was reflected in higher exports, whilst domestic consumption was down. Real prices fluctuated, as did output volumes, and fell by an average -3.9% per year over the entire period.

The volume of cereal output declined only slightly over the entire period (by an average of -0.1% per annum). However, this figure conceals a substantial increase in the first sub-period (averaging +16.8% per annum), then a period of smaller increases (averaging +2.1% per annum) in the years "1984" to "1987" and finally a severe decline (averaging -8.6% per annum) between "1987" and "1993". The differences between certain

years are considerable owing to large fluctuations in the area under cultivation. The slight decline in real prices up to 1986, subsequently accelerated, resulting in an average decline of -3.7% per year for the whole of the reference period (a development observed for most of the other Member States of EUR 12).

The volume of pig output rose consistently, by an average of +3.3% per year over the full period under review. This should be seen in the context of the steep rise in the consumption of pigmeat in Spain (approximately +4% per annum between 1983 and 1992). Real prices were maintained during the first half of the 1980s but then fell strongly until the beginning of the 1990s (an average -5.4% per year in the period "1984"/"1993"). The crisis on European pigmeat markets, together with the strong growth of domestic output volume, clearly depressed prices. The volume of milk output declined slightly during the reporting period (by -0.5% per annum on average), despite an increase (+2.1% per annum) in the period "1981" to "1984". A further expansion of milk output was hampered by European Union market surpluses and the introduction of the milk quota policy. Real prices declined during the entire period (on average, -2.5% per annum), despite a slight recovery in 1989 and 1994.

Table 5.8 Average annual rates of change in the key items of the generation of income account for agriculture in Spain from "1981" to "1993" (in %)

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**4.9**	**2.1**	**-0.5**	**1.5**	**-1.0**	**-2.4**	**-4.3**	**-3.0**	**3.8**	**-0.3**	**-4.8**	**-1.6**
Cereals	16.8	2.1	-8.6	-0.1	-1.0	-4.3	-4.7	-3.7	15.6	-2.3	-12.9	-3.8
Fresh fruit	2.6	0.7	3.7	2.7	0.2	-1.5	-7.0	-3.9	2.8	-0.7	-3.5	-1.3
Final animal output	**0.6**	**1.2**	**1.0**	**0.9**	**-0.4**	**-4.6**	**-5.0**	**-3.7**	**0.2**	**-3.5**	**-4.0**	**-2.8**
Cattle	-3.0	1.1	1.0	0.0	1.0	-2.8	-3.7	-2.3	-2.0	-1.7	-2.7	-2.3
Pigs	3.5	2.3	3.7	3.3	0.1	-6.5	-4.9	-4.1	3.7	-4.3	-1.5	-0.9
Milk	2.1	-1.2	-1.5	-0.5	-1.0	-3.1	-2.9	-2.5	1.1	-4.2	-4.4	-3.0
Final output	**2.9**	**1.8**	**0.3**	**1.3**	**-0.9**	**-3.3**	**-4.6**	**-3.3**	**2.0**	**-1.6**	**-4.3**	**-2.1**
Intermediate consumption	**2.2**	**1.9**	**0.6**	**1.3**	**1.7**	**-4.3**	**-3.2**	**-2.3**	**3.9**	**-2.5**	**-2.6**	**-1.0**
Gross value added at m.p.	**3.5**	**1.7**	**0.0**	**1.3**	**-2.8**	**-2.6**	**-5.7**	**-4.2**	**0.6**	**-0.9**	**-5.7**	**-3.0**
Subsidies									3.7	8.0	35.9	19.9
Taxes linked to production									10.4	9.0	3.4	6.5
Depreciation									4.8	3.1	-12.2	-4.5
Net value added at f.c.									**0.0**	**-1.3**	**-1.5**	**-1.1**
Rent									-3.7	0.0	-3.2	-2.6
Interest									2.5	-2.6	3.9	1.9
Net income of total labour									**0.0**	**-1.2**	**-2.1**	**-1.4**
Compensation of employees									-4.7	-4.1	-3.2	-3.8
Net income of family labour									**1.8**	**-0.3**	**-1.8**	**-0.5**

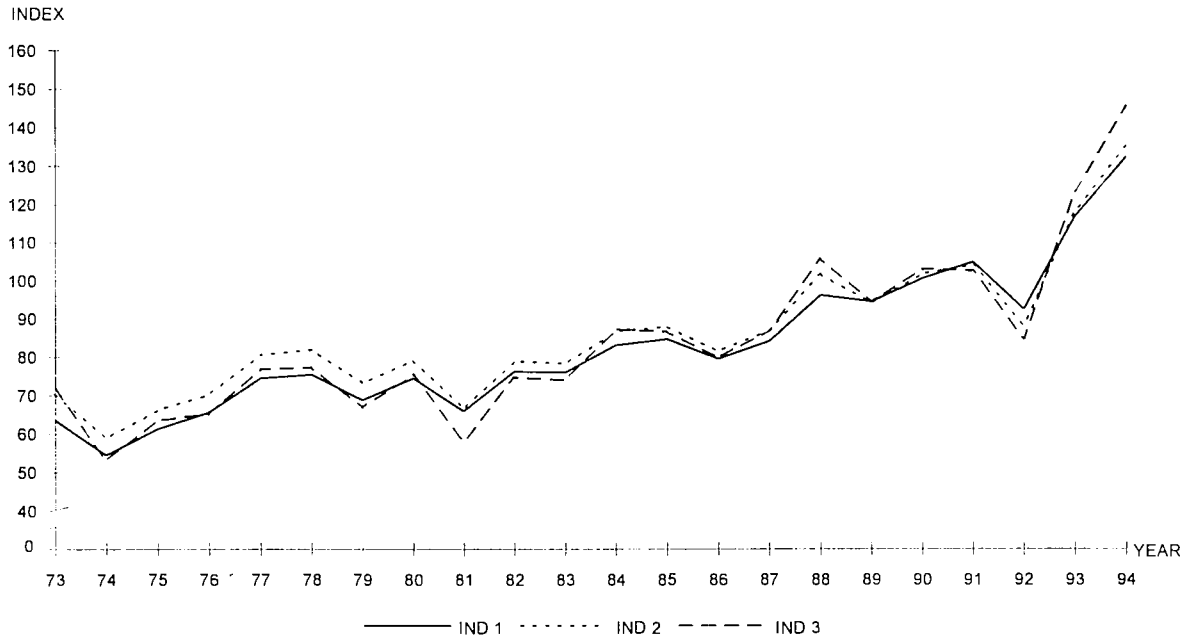
NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP = "1987"/"1993" P = "1981"/"1993"

Since the accession of Spain to the European Union, the subsidies paid to Spanish agriculture have increased dramatically (by an average of +35.9% per annum in real terms between "1987" and "1993") and have now attained one of the highest levels in the European Union. These subsidies are specific to certain types of production (sheep/goats and olive oil) and the programmes to aid agriculture in mountainous and other less-favoured areas. In contrast, taxes linked to production represent only 0.5% of the value of final agricultural output.

During the first two sub-periods ("1981"/"1987") depreciation rose moderately (by an average of +3.9% per annum in real terms) but then declined substantially between "1987" and "1993" (by -12.2% per year in real terms), resulting in an average decline for the entire period of -4.5% per year in real terms. Interest payments rose by an average +1.9% per year in real terms, in contrast to rental payments which fell by an annual average of -2.6% in real terms. The decline in the volume of total agricultural labour input was considerable in all the sub-periods, falling by -3.6% on average between "1981" and "1987" and even -5.8% per annum between "1987" and "1993".

Against the background of these developments, Indicator 2 rose by an average of +3.5% per annum. With the strong decrease in the compensation of employees (by an average of -3.8% per annum in real terms), the level of Indicator 3 rose by an even greater amount (+4.5% per annum on average).

Graph 5.6 Development in the three indicators of agricultural income in Spain between 1973 and 1994, with "1990" = 100



5.7 France

Agricultural income, as measured by Indicator 1, rose on average by +2.1% per year from "1981" to "1993" in France (this rate being slightly more than either of the EUR 12 averages). The development of Indicator 1 in France followed a number of short-term trends, similar to those calculated for the European Union as a whole. Indicator 1 for France underwent a period of growth from 1980 to 1982 (+10.7% per year) to reach a level which more or less stayed the same through to 1988, after which there was a renewed rise in income. Income levels went up by an average of +3.4% per year between "1987" and "1993" despite relatively minor falls in 1991 and 1993.

The main products are cereals, wine, milk and cattle, which account for about 60% of the value of final output in France. Crop output, which accounts for about half of the value of final output, expanded in volume during the reference period as a whole (+1.9% as an annual average) and in each of the sub-periods. From "1981" to "1984", this increase was mainly the result of cereal output (wheat and maize) and oilseeds output, which rose by +5.8% and +15.7% respectively per year on average (the gradual reduction in production area devoted to cereals being offset by the rise in yields, averaging +4.1% and +3.3% per year for wheat and maize). During "1984" to "1987", the volume of cereal output stabilized (averaging +0.3% per annum), but there was record output volume growth for oilseeds (averaging +24.5% per annum). The upswing in cereal output from "1987" to "1991" was accompanied by a stabilization in oilseeds output, although the reform of the CAP has led to declines since then. The real price of cereals declined by -5.6% per annum on average over the entire period. This reflects the situation on French cereal markets, which were oversupplied for the whole period, and the reduction in EU support measures. The same factors also brought about a deterioration in the real prices of oilseeds from "1984" to "1993" (-11.7% per year on average).

The volume of wine output rose by an average of +1.6% per year between "1981" and "1993", despite major annual fluctuations due to the weather. The strongest period of growth was in the period "1984" to "1987"

when the increase in volume averaged +3.8% per year. Mirroring the volume increases over the period, the real price of wine fell by an average -2.3% per year from "1981" to "1993".

Animal output volume remained fairly constant over the entire period (averaging +0.4% per year). A fall in this aggregate volume was avoided by the steady rise in the volumes of pig and poultry output during "1984" to "1993" (+3.2% and +5.0% respectively), since the output volumes of cattle and milk declined (an average -0.6% per year and -1.0% per year respectively) during "1984" to "1993" following the introduction of milk quotas. The reduction in cattle and milk output volumes followed slight rises between "1981" and "1984" (an average +0.8% and +0.6% per year respectively). As in all other European countries, the imbalance between supply and demand affected the domestic prices of animal output. Real prices fell by an annual average of -2.9% between "1981" and "1993" for cattle, by -1.6% for milk and by -4.7% for pigs. In all cases, the price falls were greatest in the period between "1984" and "1987".

Table 5.9 Average annual rates of change in the key items of the generation of income account for agriculture in France from "1981" to "1993", in % terms

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**3.1**	**2.8**	**0.8**	**1.9**	**-2.2**	**-4.3**	**-4.4**	**-3.8**	**0.8**	**-1.6**	**-3.6**	**-2.0**
Cereals	5.8	0.3	1.6	2.3	-4.0	-5.0	-6.7	-5.6	1.5	-4.7	-5.3	-3.5
Oleaginous seeds	15.7	24.5	-2.5	8.2	0.1	-9.0	-13.0	-8.9	15.9	13.3	-15.2	-1.4
Fresh vegetables	1.4	0.8	1.0	1.0	0.6	-4.4	-1.9	-1.9	2.0	-3.7	-1.0	-0.9
Wine	2.5	3.8	0.1	1.6	-4.8	-2.6	-0.9	-2.3	-2.4	1.1	-0.8	-0.7
Final animal output	**0.5**	**-0.5**	**0.8**	**0.4**	**-1.7**	**-3.9**	**-3.0**	**-2.9**	**-1.1**	**-4.4**	**-2.3**	**-2.6**
Cattle	0.8	-1.9	0.0	-0.3	-2.2	-3.8	-2.8	-2.9	-1.4	-5.6	-2.8	-3.2
Pigs	0.0	2.4	3.6	2.4	-2.4	-8.2	-4.0	-4.7	-2.5	-6.0	-0.6	-2.4
Milk	0.6	-1.2	-0.9	-0.6	-0.9	-1.8	-1.8	-1.6	-0.3	-3.0	-2.8	-2.2
Final output	**2.1**	**1.1**	**0.9**	**1.3**	**-2.1**	**-4.1**	**-3.8**	**-3.5**	**-0.1**	**-3.1**	**-2.9**	**-2.3**
Intermediate consumption	**0.7**	**1.7**	**0.5**	**0.9**	**0.3**	**-4.4**	**-2.5**	**-2.3**	**0.9**	**-2.8**	**-1.9**	**-1.5**
Gross value added at m.p.	**3.2**	**0.7**	**1.2**	**1.6**	**-3.9**	**-3.9**	**-4.9**	**-4.4**	**-0.8**	**-3.3**	**-3.8**	**-2.9**
Subsidies									-2.1	10.6	18.2	10.9
Taxes linked to production									2.7	1.5	-10.0	-4.1
Depreciation									0.2	-1.5	-0.8	-0.7
Net value added at f.c.									**-1.4**	**-3.2**	**-1.0**	**-1.7**
Rent									-3.0	-3.9	-2.7	-3.1
Interest									6.9	-2.2	-2.7	-0.2
Net income of total labour									**-2.0**	**-3.3**	**-0.7**	**-1.7**
Compensation of employees									0.1	-1.2	-0.1	-0.3
Net income of family labour									**-2.6**	**-3.8**	**-0.9**	**-2.1**

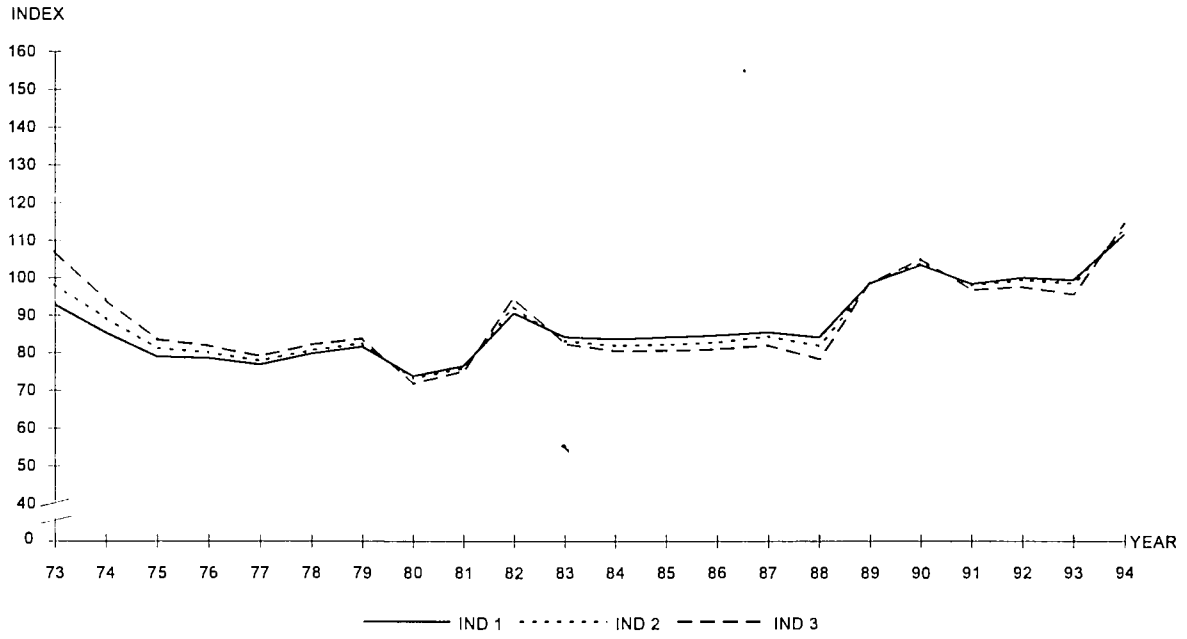
NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1993" P = "1981"/"1993"

Intermediate consumption accounts for about 45% to 50% of the value of final output, with animal feedingstuffs being the principal component. Nevertheless, the share of animal feedingstuffs in intermediate consumption in France is the lowest in EUR 12. This might reflect the large proportion of feedingstuffs grown and used on the same agricultural holding. The volume increases in intermediate consumption use (averaging +0.9% per year over the whole period) were similar to the EU averages and closely reflected the changes in final output volume. The volume of feedingstuffs rose by a steady average of +2.1% per year, perhaps reflecting a switch from the use of own-farm to off-farm feedingstuffs. These increases helped balance the decline in the consumption of fertilizers (particularly in the last sub-period with an average of -3.0% per annum). Real prices for intermediate consumption items declined in almost each sub-period, averaging out at annual decreases of -2.3% for intermediate consumption as a whole. These average annual falls ranged from -0.4% per year in real terms for services, through -3.1% per year in real terms for feedingstuffs, to -4.2% per year in real terms for fertilizers.

With the volume of intermediate consumption rising at a slower rate than that of final output, there was a slight increase in the productivity of intermediate consumption (+0.4% per year). During the same period the "terms of trade" deteriorated by an average -1.2% per year.

The level of taxes linked to production, the highest in the European Union, was greater than the level of subsidies for much of the reference period, until subsidies increased dramatically after 1992, due to CAP reform. Nevertheless, with subsidies also increasing substantially in the period between "1984" and "1987", the average rise in subsidies was +10.9% per year in real terms over the whole of the reference period. Taxes linked to production increased for much of the reference period but, allied to the CAP reform, there were significant reductions in the last few years. Over the whole period, taxes linked to production decreased by an average -4.1% per annum in real terms. The development of depreciation and interest, whose share in total output, at about 9% and 4% respectively is slightly lower than in the European Union average, would seem to point to a reduction in capital intensity; depreciation fell by an average -0.7% per year in real terms, whilst interest payments averaged out at a fairly stable annual rate of change of -0.2% in real terms.

Graph 5.7 Development of the three indicators of agricultural income in France between 1973 and 1994, with "1990" = 100



The volume of agricultural labour input decreased substantially (an average -3.7% per year for total labour input), which allowed agricultural income, expressed in AWU, to rise slightly despite the fall in real net value added at factor cost (averaging -1.7% per year). Indicators 2 and 3, which take interest charges, rent and compensation of employees into account, underwent a similar development to Indicator 1 (an average +2.1% and +2.0% per year respectively).

5.8 Ireland

Agricultural income in Ireland, as measured by Indicator 1, rose substantially but unevenly between "1981" and "1993", averaging +4.3% per year. This was the highest average rate of increase in the European Union and resulted in agricultural income in Ireland exceeding the levels reached in the mid-1970s after accession to the then European Community. The trend in agricultural income in Ireland is fairly similar to the EU average but with more marked fluctuations (steep declines in 1980, 1985, 1986 and 1991 and sharp increases in 1982, 1984, 1987, 1988, 1992 and 1994).

Over the whole period, the average annual rates of change in final output volume and real prices balanced each other out (averages of +2.2% and -2.3% per year respectively), so that the value of final output in real terms was almost unchanged (an average fall of -0.1% per annum). In each of the three sub-periods, an increase in output volume was accompanied by a fall in real prices. This equilibrium set the foundations for an increase in income per AWU, as the real value of intermediate consumption fell an average -0.6% a year, subsidies jumped an average +12.8% per annum in real terms and the volume of total labour input declined by an average -1.8% per year.

Table 5.10 Average annual rates of change in the key items of the generation of income account for agriculture in Ireland from "1981" to "1993", in % terms

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	1.1	-2.5	1.4	0.3	-4.1	-4.2	-0.9	-2.5	-3.0	-6.6	0.5	-2.2
Final animal output	4.8	0.9	2.2	2.5	-3.8	-2.4	-1.4	-2.3	0.8	-1.4	0.7	0.2
Cattle	4.6	2.2	2.8	3.1	-3.5	-3.0	-2.0	-2.6	0.9	-0.8	0.7	0.4
Pigs	-0.7	0.2	6.5	3.1	-6.2	-8.8	-1.6	-4.6	-6.8	-8.6	4.8	-1.6
Sheep and goats	6.3	8.1	9.8	8.5	-6.3	-3.4	-6.2	-5.5	-0.4	4.4	2.9	2.5
Milk	5.8	-1.3	-0.3	1.0	-3.2	-0.3	0.3	-0.7	2.4	-1.5	0.0	0.2
Final output	4.3	0.5	2.1	2.2	-3.9	-2.6	-1.4	-2.3	0.2	-2.1	0.7	-0.1
Intermediate consumption	2.1	1.6	2.1	2.0	-2.3	-5.2	-1.4	-2.6	-0.2	-3.7	0.7	-0.6
Gross value added at m.p.	6.0	-0.3	2.1	2.4	-5.1	-0.5	-1.4	-2.1	0.5	-0.9	0.7	0.2
Subsidies									15.9	4.5	15.6	12.8
Taxes linked to production									-20.3	10.5	-7.2	-6.7
Depreciation									-2.2	-1.6	1.1	-0.4
Net value added at f.c.									3.4	-0.5	3.3	2.3
Rent									-6.3	-5.7	-27.2	-17.3
Interest									-9.4	-11.0	-0.6	-5.5
Net income of total labour									7.0	1.4	3.8	4.0
Compensation of employees									-3.2	2.3	2.6	1.1
Net income of family labour									8.3	1.3	3.9	4.3

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1993" P = "1981"/"1993"

The trends in final output largely follow that of animal output, since the value of the animal output accounts for over 85% of that of final output. The volume of animal output increased by an annual average of +2.5% over the whole period, although there was particularly strong growth in the "1981/"1984" period at +4.8% per year. In contrast, there was more uneven development in the volume of crop output; an average decline of -2.5% per year from "1984" to "1987" and then an average rise of +1.4% per year from "1987" to "1993" (largely due to cereals and fresh vegetables). The volume of intermediate consumption rose at a steady annual average of +2.0%, predominantly due to the increased use of feedingstuffs for the livestock sector. With final output volume increasing at barely a faster rate than intermediate consumption, the productivity of intermediate consumption remained largely unchanged (an average +0.2%, in line with the European Union average).

The fall in the real price for final output (averaging -2.3% per year) was slightly less than the European Union average and its development almost exactly matched that of final animal output. Over the period as whole the average annual rate of change in the nominal price of final output almost matched that of intermediate consumption, so that the "terms of trade" were also relatively unchanged (+0.3% per annum).

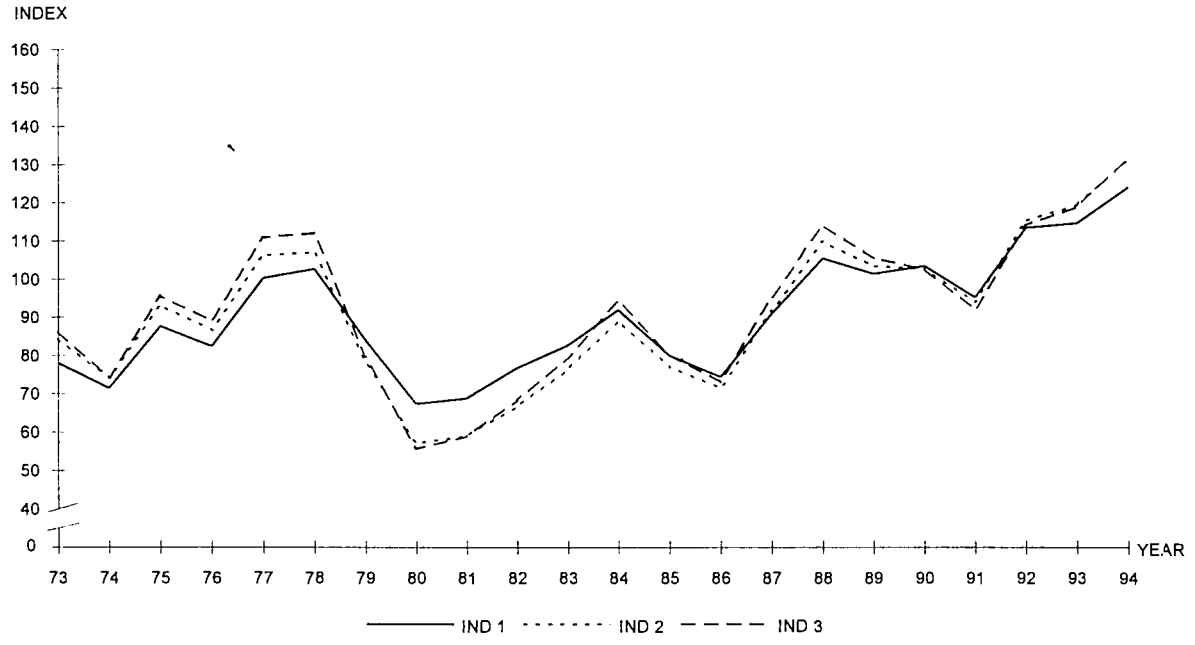
The main products in Ireland are cattle and milk, since the combined values of their output volume account for about seventy percent of the value of final output. The output volumes of these two items grew considerably between "1981" and "1984" (an average +4.6% and +5.8% per year respectively). However, following the introduction of milk quotas, the volume of milk output declined before stabilizing; an average annual decline of -0.3% being recorded for the "1987"/"1993" period. Nevertheless, there was an increase in output volume over the whole period (averaging +1.0% per annum). Despite the impact of milk quotas, the volume of cattle output continued to increase, at an annual rate of +2.6% from "1984" to "1993".

Like final animal output as a whole, the average decline in the real price for milk output almost offset the average rise in milk output volume (-0.7% and +1.0% per annum respectively). However, only very substantial real price increases in 1988 and 1989 allowed the downward impact on prices, caused by markets with a structural surplus, to be limited. The real price of cattle also fell (-2.6% per year on average over the reference period), reflecting higher output volumes.

The volume of pig output increased at an average annual rate of +3.1%, although higher output volumes were mainly concentrated in the "1987"/"1993" period (averaging +6.5% per annum), when conversely real prices fell the least over the period (-1.6% per year on average). Over the whole period, the real price of pig output decreased a strong -4.6% a year on average. There was an accelerated growth in the volume of sheep output during the period under review (from an annual average of +6.3% through +8.1% to +9.8% in the three sub-periods), and although real prices fell considerably (-5.5% per annum on average) it was insufficient to stop a rise in the real value (an average +2.5% per year -the highest rate of increase among animal products).

Agricultural incomes recovered from falling considerably between 1979 and 1981 in the wake of the decline in prices of agricultural products, the high costs of a period of intensification (especially interest costs) and the loss of the advantages derived from currency devaluation.

Graph 5.8 Development of the three indicators of agricultural income in Ireland between 1973 and 1994, with "1990" = 100



The reduction in the volume of agricultural labour input, at an average annual rate of -1.8% for total labour input (-1.5% per annum for family labour input), was one of the lowest rates in EUR 12. The substantial and sustained decline in rental payments and interest payments in real terms (averaging -17.3% and -5.5% per year) boosted the increase in incomes when measured by Indicator 2 (an average +5.9% per year). Despite an increase in the compensation of employees (an average +1.1% per year in real terms), Indicator 3 also increased sharply (an average +5.9% per year).

5.9 Italy

During the period "1981" to "1993", Italy was second to Portugal in recording the most severe decline in agricultural income; there was a reduction on a moderate to considerable scale in all three sub-periods. The level of Indicator 1 declined over the entire period by an average of -1.2% per annum. The effect of a lower

real value of final output (averaging -3.3% per annum) on agricultural income was lessened by the fall in the real value of intermediate consumption (-3.6% per annum on average). The increase in depreciation (the level of which is very high and probably overestimated), by an average of +1.7% per annum in real terms over the entire period, contributed to an average annual fall in real net value added at factor cost of -4.0%.

The slight growth in final output volume (+0.5% per annum) combined with the clear deterioration of real producer prices (-3.8% per annum) during the period "1981" to "1993" was compensated for by the severe decline in the real prices of intermediate consumption (averaging -4.2% per annum). The "terms of trade" improved slightly (by +0.3% on average per annum) whereas intermediate consumption productivity deteriorated very slightly at the same time (-0.1% per annum). The volume of total agricultural labour input fell fairly heavily, at an average of -2.9% per annum in the period "1981" to "1993" and thus dampened the effect of the decline in net value added at factor cost. Subsidies rose by an average of +3.3% per year in real terms, and accounted for around 12% of final output value in "1993", whereas taxes linked to production remained at a very low level.

Intermediate consumption accounts for only around 29% of final output, reflecting the low proportion also accounted for by animal output (crop output value represents virtually 60% of the value of final output). The most important crop products are fresh vegetables, fresh fruit, cereals and wine, while the most important animal products are milk and cattle.

Table 5.11 Average annual rates of change in the key items of the generation of income account for agriculture in Italy from "1981" to "1993" (in %)

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**0.8**	**1.2**	**0.3**	**0.7**	**-3.2**	**-4.2**	**-4.0**	**-3.8**	**-2.4**	**-3.0**	**-3.7**	**-3.2**
Cereals	3.4	2.8	1.0	2.0	-5.4	-6.6	-6.8	-6.5	-2.2	-4.2	-5.9	-4.6
Fresh vegetables	0.6	-0.3	0.0	0.1	-2.6	-4.2	-2.8	-3.1	-2.0	-4.5	-2.8	-3.0
Fresh fruit	1.1	0.7	1.8	1.3	-4.1	-3.6	-5.7	-4.8	-3.0	-2.9	-4.0	-3.5
Wine	-2.3	-0.4	-2.2	-1.8	-2.8	-0.8	-0.3	-1.1	-5.1	-1.3	-2.5	-2.8
Final animal output	**0.7**	**-0.2**	**0.4**	**0.3**	**-3.7**	**-5.6**	**-3.4**	**-4.0**	**-3.1**	**-5.8**	**-3.0**	**-3.7**
Cattle	0.4	-1.4	-1.3	-0.9	-4.9	-5.7	-2.4	-3.9	-4.5	-7.0	-3.7	-4.7
Milk	0.9	-0.1	0.0	0.2	-2.1	-3.6	-3.7	-3.3	-1.2	-3.7	-3.7	-3.1
Final output	**0.8**	**0.7**	**0.3**	**0.5**	**-3.4**	**-4.7**	**-3.6**	**-3.8**	**-2.6**	**-4.0**	**-3.3**	**-3.3**
Intermediate consumption	**0.5**	**2.0**	**0.0**	**0.6**	**-2.6**	**-7.1**	**-3.4**	**-4.2**	**-2.1**	**-5.3**	**-3.5**	**-3.6**
Gross value added at m.p.	**0.9**	**0.2**	**0.5**	**0.5**	**-3.7**	**-3.7**	**-3.7**	**-3.7**	**-2.9**	**-3.5**	**-3.3**	**-3.2**
Subsidies									7.2	-2.9	4.6	3.3
Taxes linked to production									3.9	7.8	7.3	6.6
Depreciation									1.7	2.0	1.5	1.7
Net value added at f.c.									**-3.1**	**-5.0**	**-4.0**	**-4.0**
Rent									-11.5	-4.3	-4.2	-6.1
Interest									3.5	-0.7	-6.7	-2.7
Net income of total labour									**-3.6**	**-5.6**	**-3.7**	**-4.1**
Compensation of employees									-2.2	-2.5	-1.7	-2.0
Net income of family labour									**-4.4**	**-7.5**	**-5.2**	**-5.6**

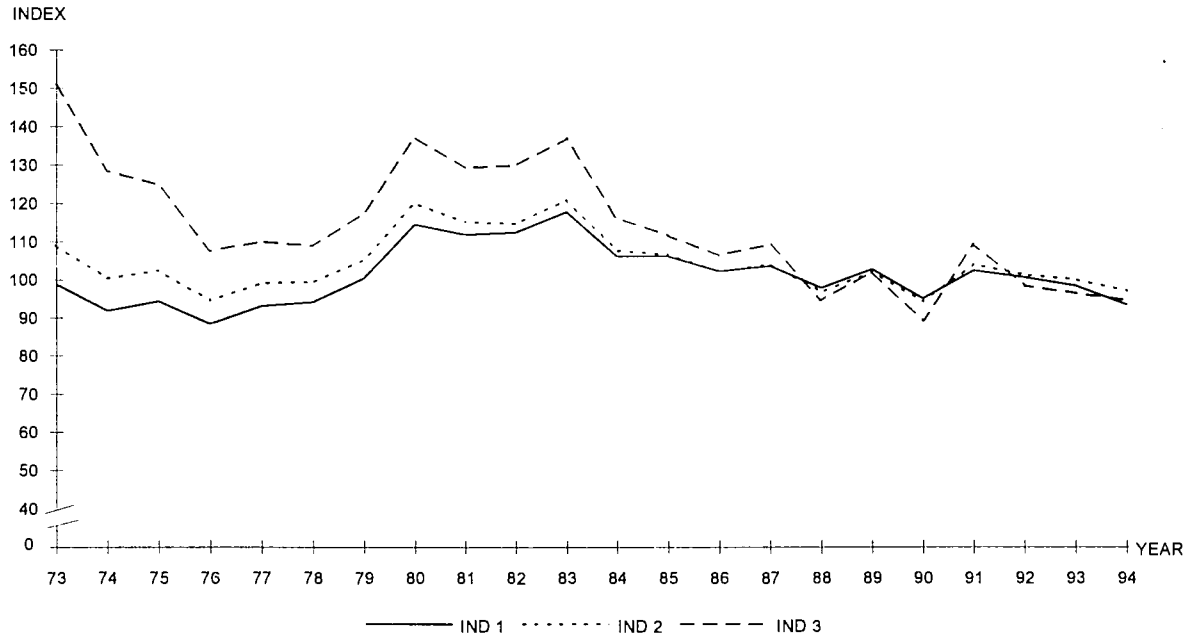
NB: SSP1 = "1981"/"1984 SSP2 = "1984"/"1987" SSP3 = "1987"/"1993 P = "1981"/"1993"

Despite some fluctuations due to climatic conditions, the volume of fresh vegetables output remained virtually constant over the entire period (+0.1% per annum). Real prices declined by an average of -3.1% per year. Real wine prices declined by an average of -1.1% per annum, particularly on account of two steep falls in 1984 and 1987 which were preceded by excellent yields. Wine output was down by an average of -1.8% per annum in volume terms as the area of vineyards was reduced. The real prices of fresh fruit fell fairly steeply over the entire period (by an average of -4.8% per annum); output volume rose by +1.3% per annum at the same time.

The volume of cereals output rose between "1981" and "1987" by an average +3.1% per year, the 1984 crop being particularly good. As the area under soft wheat and maize cultivation was reduced and because of unfavourable weather, the rise in output subsequently levelled out ("1987"/"1993" : +1.0% per annum). Real prices fell over the entire period by an average of -6.5% per annum, this development being due to the more restrictive agricultural policy and market surpluses.

Animal output was more or less unchanged in volume terms from "1981" to "1993", rising by an average of +0.3% per annum, owing to the balance of greater volumes of pig output and the stable/lower volumes of milk and cattle output (averaging +0.2% and -0.9% per annum for the entire period). In the case of milk, the volume of output increased between "1981" and "1984" by an average +0.9% per annum, but remained constant (0.0%) after the introduction of milk quotas. For cattle output, volumes rose by an average annual +0.4% between "1981" and "1984" and then fell by an average of -1.3% per annum in the years up to "1993". The real prices of cattle and milk output fell by a similar amounts (-3.9% and -3.3% respectively per annum) over the entire period.

Graph 5.9 Development in the three Indicators of agricultural income in Italy between 1973 and 1994 , with "1990" = 100



The decline in interest payments (averaging -2.7% per annum in real terms), rents (averaging -6.1% per year in real terms, though this item is of little importance) and the compensation of employees (-2.0% per year in real terms on average, the share of this item in net value at factor cost being the highest in EUR 12, at around 41%) led to an annual average fall in Income indicators 2 and 3 of -1.3% and -2.6% respectively.

5.10 Luxembourg

The growth in the level of agricultural income as measured by Indicator 1 was relatively steady, much more so than for the European Union as a whole, and increased by an average +1.6% per year over the period "1981" to "1993". Although reductions in income were observed in 1983 and 1990, these must be viewed in the light of the exceptionally large increases in other years. Nevertheless, there has not been a significant recovery in income Indicator 1 following the substantial drop in 1991.

The rate of increase in final output volume is, at an average +0.4% per annum between "1981" and "1993", the lowest in all the European Union with the exception of Germany. The real price of final output fell by an

average of -2.1% per year over the entire reference period, which was attributable to the drop in real prices for both animal (averaging -1.8% per year) and crop output (averaging -3.3% per year).

Animal output is predominant in Luxembourg's agriculture, representing over 80% of the value of final output, and mainly comprises milk and cattle production. Wine production is the most important component in crop output, accounting for around half of the final crop output value.

Milk output increased between "1981" and "1984" by an average of +2.9% per year in volume terms but subsequently fell by an average of -1.1% per year up to "1993", as a result of the introduction of the milk quotas. The real milk price dropped by an average of -0.7% per year between "1981" and "1993". In contrast to milk, the cattle output volume increased by an average of +0.7% per year between "1981" and "1993", despite there being substantial fluctuations from one year to another. Over the period "1981" to "1993", the real producer price decreased by an average of -2.8% per year. The volume of pig output also increased, by an average +1.6% per year over the period "1981" to "1993". Here too though, the real price fell (a substantial average of - 4.5% per annum) over the entire period, with particularly sharp reductions in 1986 to 1988 and 1993.

Table 5.12 Average annual rates of change in the key items of the generation of income account for agriculture in Luxembourg from "1981" to "1993" (in %).

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**-1.9**	**1.4**	**3.1**	**1.4**	**-3.2**	**-0.2**	**-4.8**	**-3.3**	**-5.0**	**1.2**	**-1.9**	**-1.9**
Wine	1.6	0.1	5.5	3.2	-9.3	0.8	-3.9	-4.1	-7.8	1.0	1.4	-1.1
Final animal output	**2.0**	**-0.6**	**-0.2**	**0.2**	**0.6**	**-1.5**	**-3.1**	**-1.8**	**2.6**	**-2.0**	**-3.3**	**-1.6**
Cattle	0.5	-0.6	1.5	0.7	0.1	-4.7	-3.2	-2.8	0.6	-5.3	-1.7	-2.0
Pigs	3.1	2.1	0.7	1.6	-2.6	-8.1	-3.6	-4.5	0.4	-6.2	-3.0	-3.0
Milk	2.9	-0.9	-1.2	-0.1	2.2	1.7	-3.2	-0.7	5.1	0.7	-4.4	-0.8
Final output	**1.3**	**-0.3**	**0.3**	**0.4**	**-0.2**	**-1.2**	**-3.4**	**-2.1**	**1.0**	**-1.5**	**-3.1**	**-1.7**
Intermediate consumption	**2.7**	**3.4**	**1.6**	**2.3**	**0.3**	**-6.2**	**-2.9**	**-2.9**	**3.0**	**-3.0**	**-1.4**	**-0.7**
Gross value added at m.p.	**0.6**	**-2.1**	**-0.4**	**-0.6**	**-0.8**	**1.7**	**-3.9**	**-1.8**	**-0.2**	**-0.4**	**-4.3**	**-2.3**
Subsidies									4.0	4.2	6.9	5.5
Taxes linked to production									7.6	11.5	-25.3	-9.5
Depreciation									-0.9	2.6	3.5	2.2
Net value added at f.c.									**0.2**	**-0.9**	**-4.2**	**-2.3**
Rent									-0.1	2.1	-1.1	-0.1
Interest									2.9	0.3	6.0	3.8
Net income of total labour									**0.0**	**-1.3**	**-5.7**	**-3.2**
Compensation of employees									-0.7	6.8	3.8	3.4
Net income of family labour									**0.0**	**-1.6**	**-6.2**	**-3.6**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1993" P="1981"/"1993"

There were extremely wide fluctuations in the volume of wine output (+164% in 1982 and +216% in 1992), which averaged out at an increase of +3.2% per year over the whole of reference period. Mirroring these changes, real prices deteriorated over the same period by a slightly greater extent (- 4.1% per year on average).

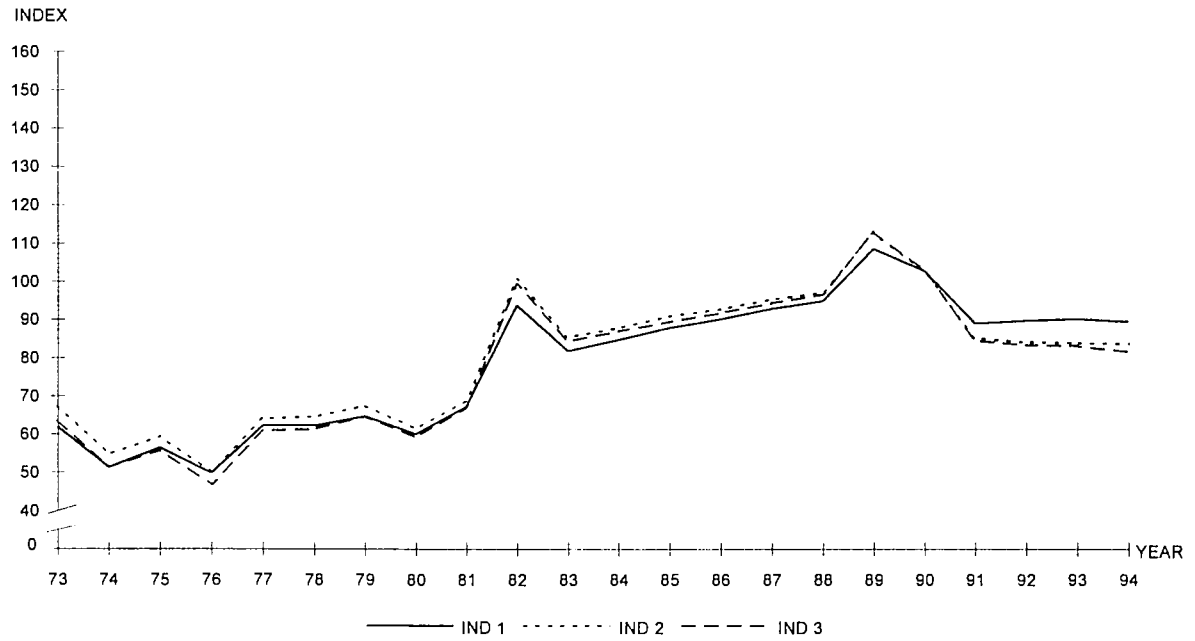
The slight increase in final output volume together with the clear increase in the volume of intermediate consumption used (averaging +2.3% per annum over the period "1981" to "1993") resulted in a deterioration of -1.8% per year in the productivity of intermediate consumption. However the value of intermediate consumption, at somewhat less than 44% of the value of final output, was relatively small for an agriculture structure in which animal production dominates. The real price level of intermediate consumption fell by an average of -2.9% per year between "1981" and "1993". In nominal terms, the price changes for intermediate consumption and final output led to the "terms of trade" improving by +0.9% per year on average.

Depreciation increased by an average of +2.2% per year in real terms between "1981" and "1993", with the biggest rise being in the period between "1987" and "1993" (an average +3.5% per annum). Over the entire reference period, the value of subsidies paid to agriculture increased by an average of +5.5% per year in real terms, whilst taxes linked to production fell by an average -9.5% per year in real terms (particularly because of the huge reductions in the years "1987" to "1993", averaging -25.3% per year in real terms).

Real net value added at factor cost, which had increased very slightly over the first sub-period "1981"/"1984" (+0.2% per annum), fell more strongly in both the following sub-periods (by an average -0.9% and -4.2% per year respectively), resulting in an average reduction of -2.3% per year over the entire period. Rental payments were almost unchanged (averaging -0.1% per annum in real terms) between "1981" and "1993", although interest payments and the compensation of employees increased clearly (by an average of +3.8% and +3.4% per annum in real terms, respectively). The reduction in the volume of agricultural labour input as a whole was very severe, with an average decline of -3.9% per year (only in Spain was a greater rate of decrease observed over the same period).

Trends in Indicators 2 and 3 were similar to those in Indicator 1. Relatively vigorous growth in the first sub-period gave way to stabilization in the second and a decline in the third. On average, Indicator 2 increased by +0.7% per year between "1981" and "1993" and Indicator 3 by +0.8%.

Fig. 5.10 Trends in the three indicators of agricultural income in Luxembourg between 1973 and 1994 ("1990" = 100)



5.11 Netherlands

Agricultural income in the Netherlands, measured by Indicator 1, remained almost unchanged over the period as a whole (an average -0.1% per year), despite average gains of +3.1% per annum in the "1981"/"1984" period. This overall stability in agricultural incomes contrasts with small annual average increases for the European Union as a whole. It resulted from the fall in real prices for final output balancing out the increase in final output volume, which combined with one of the smallest declines in the real value of intermediate consumption, led to the highest annual average rate of increase of gross value added at market prices (+0.6% in real terms) in the European Union (the only other increase being recorded for Ireland). It also reflected only a very small decline in agricultural labour input (averaging -0.5% per year, the least in EUR 12): increases in the volume of labour input in the expanding horticultural sector (including fresh fruit and vegetables), and declines in the other agricultural sectors (animal production and field crops).

Final output volume increased a steady +2.2% per year on average, and was comprised of a substantial rate of growth for final crop output in the three sub-periods (averaging out at +4.7% per year) and a smaller growth in final animal output volume (+0.6% per year on average), following stability in the period after "1984". Higher output volumes were accompanied by lower real prices, although when comparing final output prices with those of other Member States, these appeared to be moderate (an average -2.3% per year over the whole period compared with -3.1% for EUR 12 until "1991" and then -5.3% until "1994*"). This was due to several factors: a very low inflation rate (the lowest in EUR 12), a large share of production in developing sectors (flowers, etc.) and a less unfavourable trend in real institutional prices than in the other Member States. The real price of intermediate consumption also declined moderately (-2.1% per year on average), despite falling substantially in the second sub-period (an average -6.8% per year) when the real price of energy plummeted an average -16.2% per year. The purchases of intermediate consumption broadly mirrored these price patterns (+1.3% per year on average). The ratios of prices and volumes between final output and intermediate consumption show that the productivity of intermediate consumption improved (averaging +0.8% per year) and that the "terms of trade" remained almost unchanged (an average -0.1% per year).

Table 5.13 Average annual rates of change in the key items of the generation of income account for agriculture in the Netherlands from "1981" to "1993", in % terms

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**3.6**	**5.2**	**5.0**	**4.7**	**-0.1**	**-2.5**	**-3.3**	**-2.3**	**3.5**	**2.6**	**1.6**	**2.3**
Fresh vegetables	3.3	4.0	5.4	4.5	0.0	-2.9	-4.0	-2.8	3.3	1.0	1.1	1.6
Flowers	6.7	7.2	8.0	7.5	-0.6	-1.8	-4.4	-2.8	6.1	5.3	3.2	4.4
Final animal output	**2.5**	**-0.1**	**0.0**	**0.6**	**-1.0**	**-2.8**	**-2.4**	**-2.2**	**1.4**	**-3.0**	**-2.5**	**-1.6**
Cattle	2.3	0.2	1.1	1.1	-1.9	-2.7	-1.7	-2.0	0.3	-2.5	-0.6	-0.9
Pigs	4.6	5.0	0.9	2.8	-2.3	-8.7	-3.0	-4.3	2.2	-4.2	-2.2	-1.6
Milk	1.5	-3.1	-1.6	-1.2	0.3	0.9	-2.2	-0.8	1.7	-2.2	-3.7	-2.0
Final output	**2.9**	**1.8**	**2.0**	**2.2**	**-0.7**	**-2.7**	**-2.8**	**-2.3**	**2.1**	**-1.0**	**-0.8**	**-0.1**
Intermediate consumption	**2.6**	**4.7**	**-0.9**	**1.3**	**-1.0**	**-6.8**	**-0.2**	**-2.1**	**1.6**	**-2.5**	**-1.2**	**-0.8**
Gross value added at m.p.	**3.1**	**-1.3**	**5.1**	**3.0**	**-0.4**	**2.0**	**-5.3**	**-2.3**	**2.7**	**0.6**	**-0.5**	**0.6**
Subsidies									6.0	-7.7	9.8	4.2
Taxes linked to production									6.4	5.1	-1.3	2.2
Depreciation									2.5	10.3	5.0	5.7
Net value added at f.c.									**2.6**	**-1.6**	**-1.7**	**-0.6**
Rent									0.4	3.2	-1.0	0.4
Interest									-5.0	0.9	3.1	0.5
Net income of total labour									**4.3**	**-2.2**	**-2.7**	**-0.9**
Compensation of employees									-0.6	3.6	5.8	3.6
Net income of family labour									**5.3**	**-3.4**	**-5.3**	**-2.3**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1993" P = "1981"/"1993"

Agricultural production is dominated by animal production, the output value of which represented about 65% of that of final output in 1985. Towards the end of the reference period this proportion declined towards 50%; some of the main agricultural products being crop products. The combined output values of milk, flowers, pigs, cattle and fresh vegetables together constitute about 75% of the value of final output. The volume of milk output fell by an average of -1.2% per year. This decline began in 1984 after the introduction of the quota policy for the milk sector (-2.1% per year from "1984" to "1993"). Cattle production was also affected by large-scale slaughtering following the decline in milk quotas and this maintained the annual growth in output volume (+1.1% for the reference period and +0.8% between "1984" and "1993"). The volume of pig output expanded rapidly at the start of the period (+4.8% per year on average between "1981" and "1987"), although a lower rate of increase was recorded between "1987" and "1993" (averaging +0.9% per year).

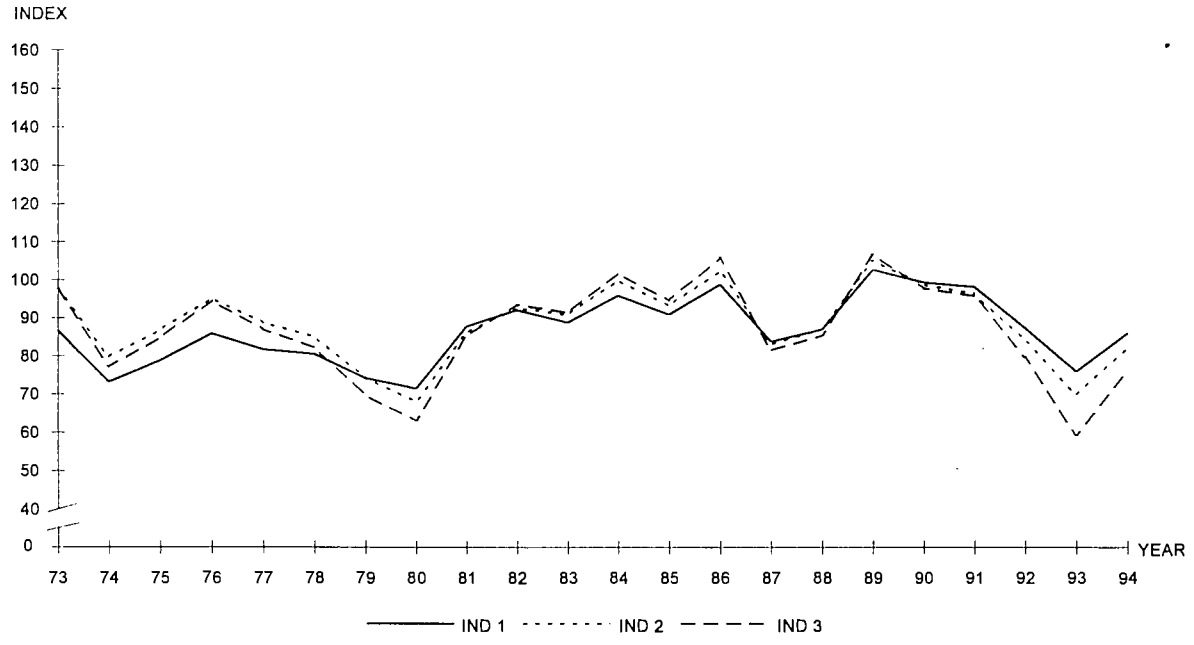
The structure of the trend in real prices for the main animal products (milk, cattle and pigs) was fairly similar: a slight increase from 1980 to 1982, followed by a decline from 1983 to 1993 as a result of surplus markets

and stricter EU policy, which was only punctuated by a degree of recovery in 1988 and 1989 (only 1989 for pigs and cattle) when the markets benefited from more favourable economic conditions and a relative structural adjustment of production. Over the period "1981"/"1993", the fall in average prices per year in real terms was -0.8% for milk, -4.3% for pigs and -2.0% for cattle.

Flower production, which plays a major role in the crop sector, increased in output volume terms at an accelerating rate over the period, that averaged at an annual rate of +7.5%. In parallel, the real price of flowers fell at an accelerated rate (-2.8% per year on average). Nevertheless, the real value of flowers rose by an average annual +4.4% over the whole period. There was a highly similar pattern for fresh vegetables, the two crops accounting for over half of the value of crop products. Fresh vegetable output increased substantially, the growth rate for volume being an average +4.5% per year, and a similar acceleration took place during the second half of the period. Real prices fluctuated greatly but there was a general decline of -2.8% per year for the overall period.

The increase in the volume of intermediate consumption used over the whole period was a little higher than the EU averages (+1.3% per year compared to +0.9% until "1991" and then -0.8% per year until "1994*"). However, the limited growth in animal output in relation to crop output, that resulted in its declining share of final output, was reflected in the purchases of intermediate consumption declining by an annual -0.9% between "1987" and "1993". The real price of intermediate consumption declined (-2.1% per year) by slightly less than the EU averages.

Graph 5.11 Development of the three indicators of agricultural income in the Netherlands between 1973 and 1994, with "1990" = 100



There was a considerable increase in the use of capital in the Netherlands, as shown by the trend in depreciation in real terms, which, with an average annual rate of change of +5.7% from "1981" to "1993", was the highest in EUR 12. Like other Member States, the latest reform of the CAP, which started in 1992 has substantially increased subsidies (as shown in the last sub-period, with an average +9.8% average increase per year in real terms) and also led to decreases in taxes linked to production. Over the period as a whole, the annual average subsidy increase was +4.2% in real terms, although taxes linked to production also rose an average +2.2% per year in real terms.

The upward development in the value of interest and rental payments, and particularly the compensation of employees as the volume of hired labour increased (an average +0.5%, +0.4% and +3.6% per year respectively in real terms), combined with some of the smallest reductions in total and family labour input in

the European Union (-0.5% and -1.3% respectively), led to more noticeable declines in agricultural Income Indicators 2 and 3 (an average -0.4% and -1.0%).

5.12 Portugal

Measured in terms of Indicator 1, agricultural income in Portugal fell by an average of -1.9% per year over the reference period. Thus Portugal and Italy were the only Member States in which agricultural incomes fell substantially. After a very slight increase between "1981" and "1984" (+0.2% per annum), agricultural incomes fell by an average -0.6% per annum between "1984" and "1987". There was then a considerable decline of -3.5% per annum on average between "1987" and "1993", mostly as a result of the sharp drop between 1991 and 1993. The reduction in agricultural income over the period "1981" to "1993" resulted from a marked fall in real net value added at factor cost (an average of -5.0% per annum) which was only partly offset by the substantial decline in the volume of agricultural labour input (-3.2% per annum).

Table 5.14 Average annual rates of change in the key items of the generation of income account for agriculture in Portugal from "1981" to "1993" (in %)

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**1.6**	**-0.7**	**-0.9**	**-0.2**	**-4.6**	**-2.6**	**-8.9**	**-6.3**	**-3.2**	**-3.3**	**-9.7**	**-6.5**
Cereals	1.9	6.8	-3.3	0.4	6.2	-3.9	-14.9	-7.3	8.2	2.7	-17.7	-6.9
Fresh vegetables	4.9	-2.0	0.8	1.1	-5.5	-2.0	-5.1	-4.4	-0.9	-4.0	-4.4	-3.4
Wine	-2.3	-4.8	-1.2	-2.4	-11.3	-4.0	-11.6	-9.7	-13.4	-8.6	-12.7	-11.9
Final animal output	**-0.5**	**3.4**	**2.9**	**2.2**	**2.0**	**-5.2**	**-9.7**	**-5.8**	**1.5**	**-2.0**	**-7.0**	**-3.7**
Cattle	-1.5	2.3	-2.0	-0.8	3.4	-4.1	-11.1	-5.9	1.8	-1.9	-12.9	-6.7
Pigs	-1.3	1.1	8.3	4.0	3.1	-6.5	-11.5	-6.8	1.8	-5.5	-4.1	-3.0
Sheep and goats	0.1	4.1	-0.8	0.6	-0.7	-6.7	-8.3	-6.0	-0.5	-2.8	-9.1	-5.4
Milk	1.1	5.7	2.4	2.9	2.4	-3.8	-7.5	-4.2	3.6	1.7	-5.2	-1.4
Final output	**0.9**	**1.4**	**1.1**	**1.1**	**-1.5**	**-3.8**	**-9.0**	**-5.9**	**-0.7**	**-2.5**	**-8.0**	**-4.9**
Intermediate consumption	**-2.2**	**1.3**	**0.3**	**-0.1**	**5.4**	**-3.5**	**-7.3**	**-3.3**	**3.1**	**-2.2**	**-6.9**	**-3.3**
Gross value added at m.p.	**4.5**	**1.4**	**-4.8**	**-1.0**	**-8.0**	**-4.1**	**-4.6**	**-5.4**	**-3.9**	**-2.8**	**-9.2**	**-6.3**
Subsidies									27.2	24.0	15.9	20.7
Taxes linked to production									3.0	-22.7	-23.9	-17.6
Depreciation									-2.8	13.2	-1.5	1.7
Net value added at f.c.									**-3.5**	**-2.6**	**-6.9**	**-5.0**
Rent									-1.7	5.9	-6.1	-2.1
Interest									15.1	-7.5	-0.6	1.3
Net income of total labour									**-6.2**	**-1.8**	**-8.2**	**-6.9**
Compensation of employees									-9.5	-1.8	-1.5	-3.6
Net income of family labour									**-5.3**	**-1.9**	**-10.2**	**-6.9**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1993" P = 1981"/"1993"

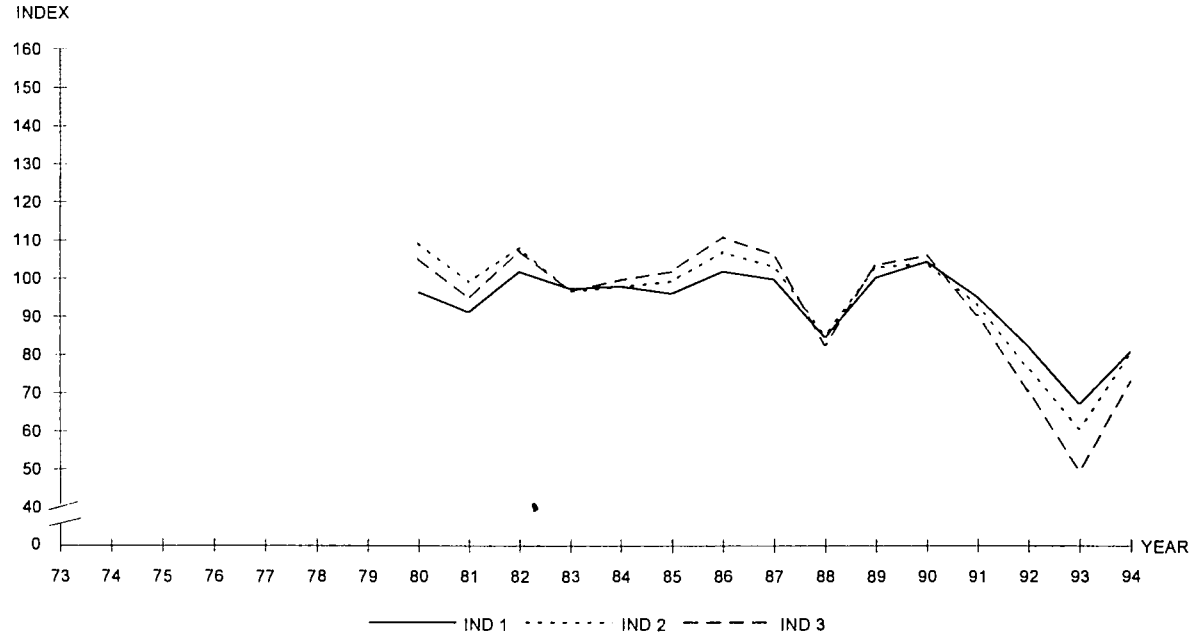
The real value of final output decreased substantially (an average -4.9% per annum), particularly as a result of a the considerable fall in its real price (with an average of -5.9% per annum, this was the sharpest drop in any country of the European Union) and despite an increase in output volume (averaging +1.1% per annum). The downward trend in prices and the upward trend in volumes accelerated over the period "1981" to "1993" with the accession of Portugal to the European Union in 1986. The volume of intermediate consumption remained virtually constant over the entire period (-0.1% per annum on average). The trend in real intermediate consumption prices was noticeably affected by changes in recent years, resulting in an average fall of -3.3% per year over the whole period (slightly more than the European Union average). In closer detail, the real price of intermediate consumption rose sharply between "1981" and "1984" (by an average of +5.4% per annum), which can perhaps be explained by the significant role played by the State in the marketing of energy products and animal feedingstuffs at the beginning of the 1980s. The productivity of intermediate consumption improved by an average of +1.1% per year over the entire period, but this increase levelled off

as marginal productivity declined. The "terms of trade" deteriorated substantially (an average reduction of -2.7% per year being the greatest in EUR 12). Nevertheless, accession to the European Union dampened this deterioration.

In recent years, the emphasis in Portugal's agricultural production has shifted towards animal output, which now accounts for around 57% of final output (the share of animal and crop output having previously been more or less the same). The products examined below (cereals, fresh vegetables, wine, pigs, milk and cattle) constitute almost two thirds of final output.

The volume of crop output changed only slightly on average (-0.2% per annum). This average figure, however, conceals major annual fluctuations and irregular trends. After an increase of around +1.6% per year between "1981" and "1984", output volume declined on average during the rest of the period under review (-0.8% per year). Short-term fluctuations in output volume are largely attributable to the particularly varying weather conditions in Portugal. In the case of cereals, the volume of output also varied considerably because of large fluctuations in the areas sown to it, but averaged at an increase of +0.4% per year over the period as a whole. The real price for cereals increased by +6.2% per annum between "1981" and "1984", but these increases were overwhelmed by the steady and considerable declines in the rest of the review period (averaging -11.4% per annum). Whilst the output volume of fresh vegetables increased by an average +1.1% per year between "1981" and "1993", the volume of wine output fell by an average of -2.4% per year over the same period, although there were considerable annual fluctuations in both cases as for example, in 1988 and 1993 when the volume of wine output slumped by -67% and -38% respectively. In both cases, the real prices decreased (by an average -4.4% and -9.7% per annum in real terms respectively) over the reference period, also with substantial annual fluctuations.

Graph 5.12 Development in the three indicators of agricultural income in Portugal between 1973 and 1994, with "1990"= 100



As a result of the increase in meat consumption, animal output volume exhibited one of the highest rates of increase in the European Union over the reference period (averaging +2.2% per annum). In particular, these increases took place between "1984" and "1993" (an average +3.1% per year), mainly as a result of the growth in pig output (+5.8% per annum) and milk output (+3.5% per annum). When viewed over the whole period, these average increases in output volume for pigs and milk were slightly lower (+4.0% and +2.9% per year respectively). This contrasts with the output volume for cattle which fell by -0.8% over the same period. After an improvement between "1981" and "1984" (averaging +2.0% per annum) the real price for final animal

output deteriorated substantially between "1984" and "1993", by an average of -8.2% per annum. This collapse is reflected in the declines, for the period "1981" and "1993", in the real prices for cattle (averaging -5.9% per year), pigs (averaging-6.8% per year) and milk (averaging -4.2% per year).

The proportion of final output represented by depreciation is low compared with the average for the European Union, but is increasing, which could suggest an increase in the capital-intensiveness of Portuguese agriculture. Depreciation increased by an average of +1.7% per year in real terms between "1981" and "1993". Over the same period, subsidies increased by an average of +20.7% per year in real terms. Taxes linked to production, which are among the lowest in the European Union, decreased by an average of -17.6% per year in real terms. The average increase of +1.3% per year in real interest payments, together with a reduction in rent payments (-2.1% per annum in real terms) and in the compensation of employees (by -3.6% per year in real terms despite their relatively small importance because of the predominance of family labour in Portugal), resulted in a drop of -3.1% and -3.8% per year respectively in Indicators 2 and 3.

5.13 United Kingdom

Agricultural income is estimated to have increased moderately when measured by Indicator 1 (an average +0.9% per annum) during the reference period ("1981" to "1993"), although this marks contrasting sub-trends. In the period "1984" to "1987" agricultural income decreased by an average -2.7% per year but this was followed by strong increases in the period "1989" to "1993" (an average +3.8% per annum). When considered over an even longer time span as is done in Graph 5.13, it is clear that the downward trend since "1974", that was only punctuated by strong increases in 1982 and 1984, reached a low in 1988. Since then, the strong rises in agricultural income have brought the level of Indicator 1 back towards the levels achieved just after the United Kingdom joined the then European Community.

Table 5.15 Average annual rates of change in the key items of the generation of income account for agriculture in the United Kingdom from "1981" to "1993", in % terms

	Volume				Real price				Real value			
	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P	SSP1	SSP2	SSP3	P
Final crop output	**4.1**	**0.7**	**0.3**	**1.4**	**-1.2**	**-4.1**	**-4.1**	**-3.4**	**2.9**	**-3.3**	**-3.9**	**-2.1**
Cereals	8.2	-1.2	-1.4	0.9	-4.7	-6.1	-4.1	-4.8	3.0	-7.2	-5.5	-3.9
Fresh vegetables	0.1	3.3	1.1	1.4	2.6	-2.2	-3.9	-1.9	2.8	1.1	-2.8	-0.5
Final animal output	**0.6**	**-0.6**	**0.1**	**0.0**	**-2.7**	**-2.9**	**-2.5**	**-2.6**	**-2.2**	**-3.5**	**-2.4**	**-2.6**
Cattle	1.6	-2.5	-1.5	-1.0	-3.4	-3.1	-1.5	-2.4	-1.9	-5.5	-3.0	-3.3
Pigs	0.4	0.8	0.6	0.6	-3.3	-6.2	-3.9	-4.3	-2.9	-5.4	-3.3	-3.7
Milk	0.6	-1.8	-0.9	-0.8	-2.6	-1.4	-1.0	-1.5	-2.0	-3.1	-1.9	-2.2
Final output	**1.9**	**-0.1**	**0.2**	**0.5**	**-2.2**	**-3.4**	**-3.1**	**-2.9**	**-0.3**	**-3.4**	**-3.0**	**-2.4**
Intermediate consumption	**1.6**	**0.7**	**-1.0**	**0.1**	**-0.4**	**-4.2**	**-1.9**	**-2.1**	**1.2**	**-3.4**	**-3.0**	**-2.1**
Gross value added at m.p.	**2.3**	**-1.1**	**1.5**	**1.1**	**-4.2**	**-2.4**	**-4.4**	**-3.9**	**-2.0**	**-3.5**	**-3.0**	**-2.8**
Subsidies									13.5	-0.4	13.2	9.7
Taxes linked to production									2.8	15.0	-15.0	-3.9
Depreciation									-1.7	-1.7	-3.8	-2.8
Net value added at f.c.									**-0.8**	**-4.3**	**0.8**	**-0.9**
Rent									10.3	0.0	-6.2	-0.8
Interest									-1.0	-1.0	-8.3	-4.7
Net income of total labour									**-1.1**	**-5.1**	**2.5**	**-1.2**
Compensation of employees									-0.1	-2.9	-1.8	-1.7
Net income of family labour									**-1.7**	**-6.5**	**5.1**	**0.4**

NB: SSP1 = "1981"/"1984" SSP2 = "1984"/"1987" SSP3 = "1987"/"1993" P = "1981"/"1993"

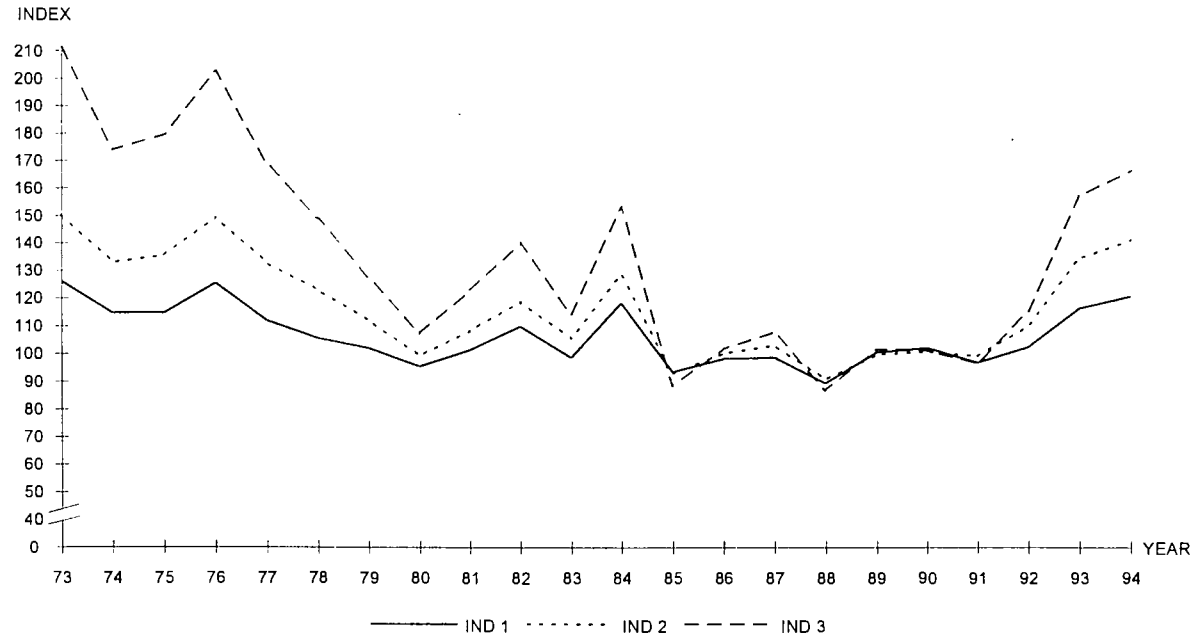
The value of final output is derived from about 60% animal output and 40% crop output. The developments of both the volume and real prices for animal and crop output followed fairly similar patterns and therefore so did final output. Real prices decreased substantially in each sub-period for animal and crop output, with the

sub-period "1984" to "1987" being particularly strong (an average decline of -2.9% and -4.1% respectively per year). Over the period as a whole the real price of final output decreased by an average -2.9% per year. In contrast, the volume of final output increased (averaging +0.5% per year over the whole period), although this was mostly concentrated in the "1981"/"1984" period when volume growth in both crop output in particular but also animal output were at their strongest. As a result of these changes, the value of final output decreased by an average -2.4% per year in real terms, which was derived from similar average annual declines for animal and crop output (-2.6% and -2.1% in real terms respectively).

The stability of the volume of animal output over the whole period stemmed from average annual decreases for milk and cattle, limited to the period after "1984" with the introduction of milk quotas, being countered by steady and progressive growth mainly in the sheep and poultry sectors (an average +4.3% and +3.3% per annum respectively) but also to a lesser degree for pig output (an average +0.6% per year). The real price for animal output decreased very steadily throughout the period (-2.6% per year on average), based on declines for every type of animal output in the three sub-periods. The decrease in real prices over the period as a whole varied from an average of -1.5% per year for milk output, through -2.4% per year for cattle, to -4.3% for pig output.

The period "1981"/"1984" was marked by a sharp average annual increase in the volume of crop output (+4.1%), which caused much of the increase in final output for the entire period. In the second half of the reference period there was a much weaker rate of crop output growth, partly as a result of a more restrictive agricultural policy. This was particularly the case for cereal output, that having increased by a substantial average annual +8.2% per year between "1981" and "1984", declined during "1984" to "1993" by an average -1.3% per year. In parallel, the real price of cereals fell by a relatively consistent average of -4.8% per year over the whole reference period. The volume of fresh vegetable output increased gradually (an average +1.4% per year over the whole period), but was slightly outweighed by the average annual rate of decline in the real price (-1.9%, although particularly strongly in the sub-period "1987"/"1993" at -3.9%).

Graph 5.13 Development of the three indicators of agricultural income in the United Kingdom between 1973 and 1994, with "1990" = 100



The volume of intermediate consumption also remained principally unchanged (an average +0.1% per year from "1981" to "1993"), although this hides a distinct shift from moderate increases in "1981"/"1984" through small rises to moderate declines in "1987"/"1993". The use of all the main intermediate consumption items decreased in the final sub-period, from an average decline of -0.4% per year for feedingstuffs, through -2.2%

per year for fertilizers to -3.0% per year for plant protection products. The productivity of intermediate consumption for the whole period rose by an average +0.5% per year, since the average annual rate of increase in the volume of final output, although small (+0.5%) was still greater than that of intermediate consumption (+0.1%). At the same time, the "terms of trade" deteriorated by an average -0.8% per year.

As a result of the changes to the real value of both final output and intermediate consumption, gross value added at market prices declined by a steady average annual rate of -2.8% over the reference period. CAP reform, particularly towards the end of the reference period, provided a double edged impetus to stabilizing incomes with higher subsidies (+9.7% per year in real terms when averaged over the whole period) and lower taxes linked to production (-3.9% per year in real terms when averaged over the whole reference period, because of strong decreases in the last sub-period of -15.0% per year on average). When combined with an average annual decline in real depreciation of -2.8%, net value added at factor cost, the basis for Indicator 1, decreased by an average by -0.9% per year over the whole reference period, although this conceals marked decreases averaging -4.3% per year in the period "1984" to "1987".

Despite interest rates falling an average -4.7% per year in real terms, mainly due to the third sub-period (-8.3% per year on average) when interest rates fell to their lowest level over the reference period, and to a lesser extent rental payments (-0.8% per year in real terms on average), net income of total labour declined by -1.2% per year on average. The compensation of employees accounts for a large proportion of the value of final output (about 12%) in the UK as it does in other European Union Member States. Therefore the significant decline of -1.7% per year in real terms on average led to the slight increase in net income of family labour over the period (+0.4% per year).

The Income Indicators define incomes per AWU. The rise, rather than fall, in Income Indicators 1 and 2 was because the volume of total labour input in agriculture declined by an average -1.7% per year. The increase in Indicator 3 was also helped by the average annual decline in the volume of family labour input of -1.2% per year. The decrease in the volume of family labour input was the lowest rate of decline in the European Union.

6 Comparison of agricultural income levels in the Member States of the European Union

The previous chapters have concentrated on the annual rates of change in agricultural income. This chapter deals with the differences in income levels between the Member States and the relative trends in these levels[1].

For this purpose, the parameter chosen is **net value added at factor cost per annual work unit**. Three-year averages have been used ("1993"[2] for the comparison of current levels, with "1981" and "1985" for trends in income levels[3]) in order to attenuate the short-term effects on income (annual fluctuations in production, agricultural prices and subsidies). The basic data in nominal value and national currencies have been converted into ECU and PPS via current exchange rates. The use of PPS brings the purchasing power of the national currencies in the Member States more into line[4]. To improve comparability, the values for each Member State have been compared with a European Union average.

The statistical and methodological reservations expressed below mean that, economically speaking, the data published in this chapter can only be regarded as indicative and limited in value.

- The data refer only to incomes from agricultural activity. It should not be forgotten that for numerous farmers, agricultural income represents only one part of the total or disposable income of their household (see Chapter 7). The relative size of this portion can of course vary from one Member State to another.
- The use of other income indicators, such as net income from agricultural activity of the family labour input by AWU, might show significant changes in the relative position of certain Member States, since the share of rents, interest paid and compensation of employees differs from one country to another. As stated in the introduction, however, the corresponding series do not seem to be sufficiently harmonized as yet.
- Methodological and statistical checking of the Economic Accounts for Agriculture is in hand; this applies to all the items (production, intermediate consumption, distributive transactions, gross fixed capital formation and depreciation) and will probably lead more to amendments to the absolute levels than to annual changes. In particular, it will be seen that the various methods used to calculate depreciation could create systematic bias in income levels.
- The agricultural labour input is measured in annual work units (AWUs); this is justified by the importance of part-time work in agriculture. In spite of the advantages which this concept presents, one should not forget that it does not allow any under-employment in agriculture to be taken into account. In addition, data on the agricultural labour input measured in AWU are not yet completely harmonized at European Union level.

With the above reservations in mind, it is clear that considerable differences in agricultural income per annual work unit exist between the Member States (see graph 6.1 and Table 6.1). It is also evident that the relative levels and the income order of Member States change little according to whether the ECU or PPS is taken as the basis, and have changed only slightly over the twelve-year period.

Three Member States of northern Europe (B, DK and NL) are at the top of the agricultural income scale measured by **net value added at factor cost per AWU for "1993" in ECU**, with levels about twice as high as the European Union average. In France and the United Kingdom agricultural income is also considerably above this average (about +45% higher), with Luxembourg, Spain and Germany providing a third tier with agricultural incomes some +10-30% above this average. Agricultural income is clearly below the European Union average in the other Member States, with income about -20% to -25% less than the European Union

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1 For Italy (depreciation) and Portugal, more detailed plausibility checks are in hand.

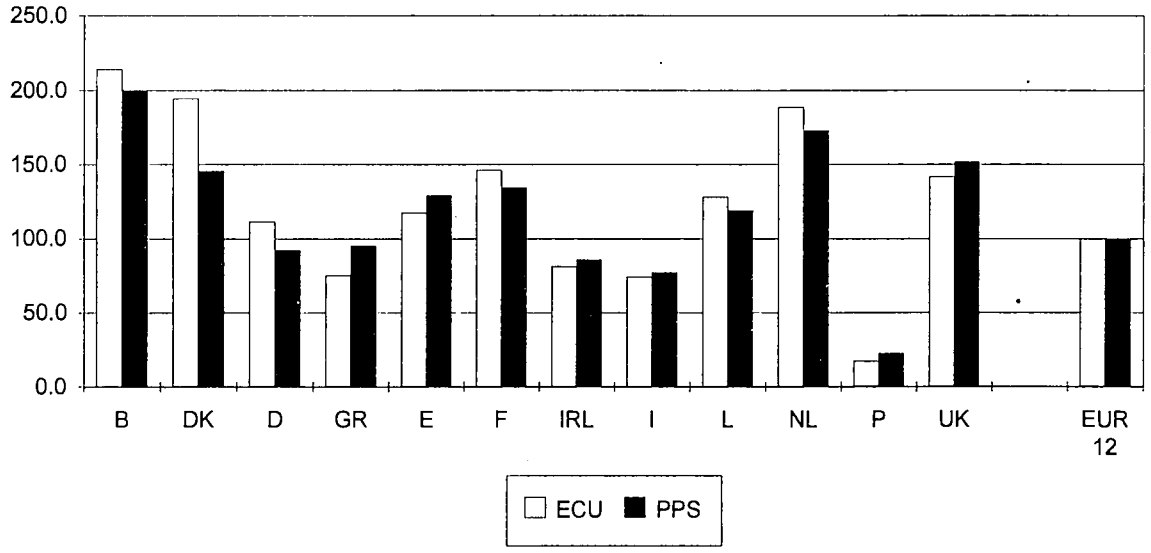
2 "1993" = (1992 + 1993 + 1994)/3.

3 In the averages for "1981" and "1985", the figures for Germany and EUR 12 refer to Germany in its territorial boundaries prior to 3 October 1990. For "1993", the figures for Germany and EUR 12 refer to Germany in its territorial boundaries after 3 October 1990 and therefore include the new "Länder".

4 PPS = purchasing power standard; for the definition, see Eurostat: **Purchasing power parities and real gross domestic product - results for 1985, Luxembourg 1988** (theme 2, series C). In the absence of specific purchasing power parities for the agricultural sector, the ones used are applicable to the whole economy and reflect the general structure of expenditure in each Member State.

average in Ireland, Greece and Italy, and at around one-fifth of the average in Portugal. Although direct comparisons between Member States, especially using ECU, should be treated with caution (see the reservations stated above), it can be concluded that the differences in average income received by a person (whether self-employed or employed) for activities in the agricultural branch over a one-year period (after adjustment for subsidies, taxes linked to production and depreciation) may be very substantial, especially in extreme cases (Belgium and Portugal).

Graph 6.1 Indices of net value added at factor cost per annual work unit in "1993", in ECU and PPS (EUR 12 = 100).



The use of PPS for measuring **net value added at factor cost per AWU** slightly reduces differences in agricultural income between Member States. Income measured in PPS is in fact lower in relative terms than when measured in ECU for almost all Member States above the European Union average (except the United Kingdom and Spain, where income in PPS is slightly higher), Denmark being an especially clear-cut case. In all four of the countries below the average (GR, IRL, I and P), conversion into PPS results in some improvement in the relative position of income. Although Portugal's relative position improves with the use of PPS (its difference with the countries who have a relatively high agricultural income is slightly reduced as a result), agricultural income in that country remains by far the lowest in the European Union (23% of the average). It should be noted that the order of classification of the Member States according to the level of agricultural income is only slightly changed by conversion into PPS instead of ECU: Denmark moves from second to fourth position, with the Netherlands and then the United Kingdom moving up, France slips to fifth in the order, Spain and Luxembourg swap places into sixth and seventh and Greece moves above Germany and Ireland into eighth.

The differences between the levels of agricultural income of the Member States in "1993" having been described, there follows a brief review of the trend in their relative positions since "1981" (see Table 6.1). For this purpose, the relative positions of net value added at factor cost per AWU have been calculated in ECU and PPS for each Member State, taking as a reference the NVAfc per AWU of EUR 12 for each of the years studied ("1981", "1985" and "1993").

When comparing the trends in ECU and PPS, it should be borne in mind that currency movements in the period under review can considerably affect the results shown. Additionally, results for a Member State are always relative to the average at the European Union level. Therefore, for example, even if net value added at factor cost per AWU increases in a given year for a given Member State, but does so at a lower rate than the European Union average, the result, *ceteris paribus*, will be a decline in the PPS or ECU level for that

year and that Member State. For these reasons, among others, the trends in Indicator 1 may be significantly different from those presented here.

Table 6.1 Indices of net value added at factor cost per annual work unit in "1981", "1985" and "1993", in ECU and PPS (EUR 12 = 100)

	"1981" ECU	"1985" ECU	"1993" ECU		"1981" PPS	"1985" PPS	"1993" PPS
B	228.8	213.1	214.2		202.1	206.4	200.0
DK	199.9	254.2	194.3		152.0	190.3	145.4
D (1)	105.3	105.8	:		89.5	91.0	:
D (2)	:	:	111.6		:	:	92.3
GR	77.3	71.4	75.4		84.8	84.6	95.2
E	80.7	83.8	117.5		94.0	103.2	129.0
F	138.6	135.8	146.0		120.7	121.9	134.2
IRL	64.7	76.2	81.3		60.1	66.8	85.9
I	89.1	89.4	74.3		102.9	91.6	77.1
L	124.2	133.4	128.0		112.2	126.9	118.8
NL	246.4	256.6	188.5		205.2	224.5	172.7
P	18.2	17.8	17.4		31.5	31.6	22.7
UK	181.0	159.6	141.6		159.0	154.4	151.6
EUR12 (1)	100.0	100.0	:		100.0	100.0	:
EUR12 (2)	:	:	100.0		:	:	100.0

(1) With Germany in its territorial boundaries before 03 October 1990.
(2) With Germany in its territorial boundaries after 03 October 1990 i.e. including the five new "Länder".

When measured in PPS, which would appear preferable for a comparative analysis of income levels over a thirteen -year period, the relative situations of some Member States changed significantly over the period, as a result of differing trends. The widely disparate development of incomes for 1994 between some Member States has in some cases altered the long-term trends and in others accentuated it. However, it is clear that there have been substantial improvements in Spain, Greece, France and Ireland, and a significant decline in Italy. In these cases, this is in line with the trends of agricultural income Indicator 1 recorded for these countries (see Chapter 5). In three Member States (E, F, and IRL), estimates for "1993" put the indices of net value added at factor cost per annual work unit in terms of PPS at the highest level since the start of the period ("1981"). In four other Member States (DK, I, NL and P) the index is at its lowest level over the period.

In "1981", the two Member States with the highest agricultural income (in terms of PPS) were the Netherlands and Belgium. By "1993" these countries continued to hold the highest levels of income, although swapping relative positions. In the Netherlands, it appears that income has decreased markedly and steadily compared to the EU average, since it peaked in "1985". In Belgium, the index level has gently fluctuated either side of about 208. There was a downward trend in relative income in the United Kingdom until "1990" (index level = 134.3), since when there has been some recovery, which has enabled the United Kingdom to regain the third highest level in the European Union, a position that it last held in "1981". This was at the expense of Denmark, where relative income had increased sharply in the middle of the 1980's to a peak in "1985" but then fallen back to just a little less than its level in "1981" (although this is still 40% more than EUR 12 average). The progressive rise in the index level for France over the period was maintained with the "1993" results, so that the PPS level was fourteen percentage points higher than "1981". The progressive increases for Luxembourg that were evident until "1989" were substantially undone by the cumulative falls in the sub-period "1990" - "1993". With continued improvements to the relative income level in Spain (up thirty-five percentage points over the review period), sixth position on the index was no longer held by Luxembourg.

Among the Member States which are below the European Union average, the relative situations of Greece and Ireland improved considerably over the thirteen-year period. Agricultural income in Greece is now close to the European Union average having been 15% to 20% lower at the start of the review period, and in Ireland has narrowed from being 40% lower to 15% lower. The opposite has occurred in Italy and Germany. In Italy income has declined steeply and steadily over the period, falling about twenty-five percentage points.

In Germany, only the inclusion of results for the new "Länder" avoided a similarly sharp fall in the much shorter period since "1989". However, the results between the old and new territorial situations and therefore the start and end of the review period appear at first sight to show that there has been relatively little change in the PPS level. Finally, the relative situation of agricultural income in Portugal has not improved, indeed it has fallen to about 23% of the European Union average.

7 Total income of agricultural households

7.1 Introduction to TIAH statistics

The Economic Accounts for Agriculture, and hence the income indicators used elsewhere in this publication, give information on the level and development of income arising from the production of agricultural commodities. While this is a central element in the income of the agricultural community, there is now a strong realisation that the economic situation of those households which comprise this community cannot be adequately described using these indicators alone. Previous Agricultural Income reports have given information about the work that is being undertaken, with the support of the Directorate-General for Agriculture and with the co-operation of Member States, into estimating at aggregate level the disposable incomes of agricultural households, covering their incomes from all sources and the deductions (mainly personal tax and social contributions) that they have to pay.[1] The results are termed Total Income of Agricultural Households (TIAH) statistics.

This chapter summarises the main TIAH findings. All Member States now supply results, though not yet in a completely harmonized form. Further details will be published later this year as *Total Income of Agricultural Households: 1995 Report.* This is to be the latest in a series of special TIAH documents describing the basic data sources available in Member States (including those countries that joined the European Union at the start of 1995), the methods used to estimate disposable income in aggregate and per household, per household member and per consumer unit, and the results on a country-by-country basis[2]. A Manual giving details of the harmonized methodology agreed and used by Member States was published in 1990[3]. It is planned to publish a revised version later in 1995, incorporating developments in the methodology that have emerged from experience in its use and to accommodate changes in the European System of Integrated Economic Accounts (ESA).

7.2 Rationale

From the outset of the Common Agricultural Policy there has been recognition of the interaction of agriculture with the rest of the economy, especially the local economy in rural areas. The Farm Structure Survey has established that about one third of farm holders have another gainful activity[4], to which when assessing the importance of these links should be added the work of spouses and other members of farmers' households in activities off the holding. The use of farm resources in forms of production that are not strictly agricultural (such as food processing, tourism and for the provision of environmental services) is encouraged as one way of enabling farmers to diversify, because of the economic situation facing the agricultural sector and the changes to the CAP that are intended to make production more sensitive to market conditions. Off-farm occupations appear to be of increasing importance to farm families, and since 1988 the enlarged Structural Funds of the European Community have been, in part, used for promoting such broadening of the industrial base in areas selected for rural development assistance. The reforms to the CAP introduced in 1992 seem likely to accelerate this diversification of income sources among farm households. To these sources of

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1 Close liaison has been maintained with other parts of the Commission which are also concerned, in separate ways, with the income situation of farmers and their households. In particular, this applies to the Directorate-General for Agriculture (DG VI) that co-ordinates the Farm Accountancy Data Network (FADN, or RICA), an annual survey of a sample of farm accounts, and Eurostat's Unit-E2 (Living Conditions) which is co-ordinating the European Community Household Panel (ECHP) survey, an exercise currently being carried out to improve knowledge of incomes and living conditions of households in the European Union (not restricted to agricultural types). These microeconomic projects are potentially complementary to the TIAH statistics.

2 The main publications containing results are as follows. Each is available in English, French and German.
Hill, Berkeley (1988) *Total Incomes of Agricultural Households: Existing information and proposed methodology for a harmonised aggregate indicator.* Theme 5 Series D. Luxembourg: Eurostat. 133 pages.
Hill, Berkeley (1992) *Total Income of Agricultural Households: 1992 Report.* Theme 5 Series E. Luxembourg: Eurostat. 134 pages.
Hill, Berkeley (1994) *Total Income of Agricultural Households: Progress in 1993.* Theme 5 Series D. Luxembourg: Eurostat. 49 pages.

3 Eurostat (1990) *Manual on the Total Income of Agricultural Households.* Theme 5 Series E. Luxembourg: Eurostat.

4 The latest survey results from Member States show that the following percentages of holders had another gainful activity: Belgium 34% (1990), Denmark 34% (1989), Germany 44% (1991), Greece 32% (1991), Spain 34% (1989), France 24% (1990), Ireland 26% (1991), Italy 30% (1990), Luxembourg 19% (1989), Netherlands 24% (1987), Portugal 36% (1989), United Kingdom 30% (1990), EUR 12 30% (1987).

income from economic activity could be added other forms of income, including welfare transfers such as pensions received by elderly farmers (important in some Member States) and receipts from property (interest and rents).

The objectives of the TIAH work are given in Figure 7.1. In subsequent discussion with the Commission's Directorate-General for Agriculture, one of the major users of agricultural data, it has become clear that the TIAH results are seen as providing important background information by which developments can be monitored and the needs for action can be considered. Other uses can be anticipated in the areas of regional development, social policy and so on. It is recognised that TIAH results are not appropriate for the detailed management of individual policy programmes. Furthermore, they are complementary to the existing production-branch indicators; there is no suggestion that the new measure should be a substitute for them.

Figure 7.1 TIAH objectives

A harmonized methodology is to be used to generate an aggregate income measure for the following purposes:

- monitoring the year-on-year changes in the total income of agricultural households at aggregate level in Member States;
- monitoring the changing composition of income, especially the proportions of income from the agricultural holding and from other gainful activities, from property and from social benefits;
- comparing the trends in the total income of agricultural households per unit (household, household member, consumer unit) with that of other socio-professional groups;
- comparing the absolute income of farmers with that of other socio-professional groups, on a unit basis.

7.3 Methodological framework

Definition of an agricultural household ("narrow" approach)

An important feature of the TIAH methodology is its definition of an agricultural household. For the purpose of classification, households are allocated to socio-professional groups on the basis of the main source of income of the reference person (typically the head of household or the largest contributor to the family budget). This system allows a complete and consistent allocation of households to occupation groups for the purpose of drawing comparisons. Thus an agricultural household is one in which *the main source of income of the reference person is from independent activity in agriculture*.[5] Some Member States, that cannot at present use an income criterion, depend on the main declared *occupation* of the reference person. In the context of the TIAH statistics these definitions of an agricultural household are sometimes labelled "narrow" since they exclude those households which operate a holding but where farming is not the main source of income occupation of the reference person (see below). Of course, when measuring household income the incomes of all members are summed, but these additional incomes are not considered at the classification stage. All Member States (except the Netherlands and Denmark) now use this reference person system in calculating their TIAH results.[6]

This system can result in some households being classed as agricultural where farming contributes only a minor part of the household's total income (for example, where there may be several household members who work primarily off the farm), but such cases have to be accepted as a price of the practicality of a reference person system.[7] There is also the possibility that it could lead to substantial year-to-year changes in the numbers of agricultural households, as a reflection of the instability which characterizes incomes from farming. This would make income results difficult to interpret. However, most Member States operate

5 Where possible the group of agricultural (farmer) households should not include forestry or fishery households.

6 In the Netherlands classification is based on the income composition of the entire household, but the socio-economic characteristics of households with agricultural holdings means that this departure from the harmonised methodology is of little significance, though the extent of this will be regularly monitored. In Denmark classification is on the basis of the income of the family; the situation is also under review.

7 Initially the "target" TIAH methodology used a classification based on the main source of income of the entire household. However, when drawing up results few Member States found this practical and the "target" methodology was changed to a reference person system in December 1992. However, this methodology will be kept under review in light of the preference expressed in the revised ESA (European System of National and Regional Accounts), to be published in 1995, for classification to be undertaken on the basis of the income composition of the entire household.

mechanisms that prevent such short-term fluctuations and give a degree of stability to households that comprise the agricultural group.

Two of the objectives underlying the TIAH statistics explicitly involve comparisons between agricultural households and other socio-professional groups (developments of income and absolute levels of income). To facilitate comparisons, a harmonized list of socio-professional groups has been developed for use in the present context, drawn up after reviewing the categories currently used in the data sources from which TIAH results are derived.[8]

When comparing households in different socio-professional groups according to their levels of disposable income, there appears to be no strong reason why restrictions should be placed *a priori* on the selection of groups. Though there may be a particular policy interest in seeing how the incomes of agricultural households compare with, for example, the incomes of small retail traders, there is little inherent reason why their potential spending power should not be compared with household headed by employed persons, or by persons who are retired or mainly dependent on social transfers for their income. Real differences in costs of living (especially of housing, food and transport) may require caution when drawing inferences about relative potential consumption levels, but this also applies to many other forms of comparison (such as disparities in the costs faced by rural and urban households, which may be large). These cost differences are not in essence related to the manner in which the income is generated. Nevertheless, when interpreting comparisons it should be borne in mind that the income from farming differs in its economic characteristics (including risk) from, for example, income from employment, and that satisfactory data are often less easy to obtain for income from self-employment, not least because the concept of income is more complex and involves the identification and evaluation of a greater volume of items that are taken as income in kind.

Supplementary "broad approach" to defining an agricultural household

The prime focus of attention of the TIAH statistics remains the "narrow" approach to what constitutes an agricultural household. Nevertheless, for some policy purposes it may be desirable to treat all households with some income from farming as "agricultural". By subtraction it should also be possible to throw light on the income situation of those households with agricultural holdings but which are not primarily dependent on farming for their livelihood[9]. This "broad" approach was foreseen at the time when development work on TIAH statistics was initiated and provision was made for it, in principle, in the methodology. Since then, the interest of policy-makers in supplementary income estimates using a "broad" approach has increased, leading to requests for results calculated on this basis.

In the TIAH methodology, the "broad" definition an agricultural household is *one which derives an income from independent activity in agriculture (other than income solely in kind)*. Because of the way in which the household is defined, this means that a household is included under this "broad" approach if *any* member of the household has some income in this form. The TIAH Manual allows a degree of flexibility as to the precise ways in which the terms "household" and "income" are interpreted, to reflect national data sources and customs. Because the "broad" definition is seen as supplementary to the main methodology, it is not considered as necessary to generate results based on it annually (though any Member State may do so if it wishes). Rather, occasional estimates are likely to be adequate.

Definition of income

The primary income definition used in TIAH statistics is *net disposable income*, expressed as an aggregate for the entire households sector or subdivisions of it (agricultural households, other socio-professional groups) and per unit (per household, per household member and per consumer unit). This covers income from all sources (including farming, other independent and dependent activities, property income, social and other transfers) and is after the deduction of current taxes on income and wealth, social contributions and other outward transfers. It corresponds to the definition used in the Distribution of Income Account for the

8 The principal categories are (a) employers and own-account workers (main income of reference person from independent activity) subdivided into (i) farmers and (ii) others; (b) employees (main income of reference person from dependent activity); (c) others; (d) all households except farmers; (e) all households. Provision is made for a subdivision of (a)(ii), (b) and (c) according to the occupation or type of income received.

9 Results from the use of the "broad" approach have to be interpreted with caution; in some Member States (for example, Greece) it is felt by the national statistical authority that the family structure makes income figures calculated on this "broad" basis of limited value for casting light onto the income situation of the agricultural community.

households sector within the European System of Integrated Economic Accounts (ESA). Member States are required to provide information on each component leading to disposable income. For some analytical purposes total income (before deductions) is taken, such as when describing the relative contribution to the total coming from farming and from other activities.

7.4 Main TIAH results

Availability of results

TIAH results are available for all Member States of EUR 12 using a "narrow" definition of an agricultural household, although countries differ widely in the number of years covered and degree of disaggregation. At one extreme is Germany, where annual figures for the period 1972-1993 are contained in the TIAH database, broken down into socio-professional groups of which agricultural households form one. At the other are those countries for which only a single year is currently represented (Belgium (1987), Ireland (1987) and Luxembourg (1989)) or a larger number where comparable figures for non-agricultural households are not broken down in detail. Results for Austria, Finland and Sweden are not yet calculated, though the basic data by which this could be done appears to be available and TIAH estimates are anticipated during 1995. There is a commitment by Member States to expanding the number of years for which results are available, to a universally applying the "minimum" list of socio-professional groups, thereby enabling a more detailed comparison of the incomes of agricultural households, and of making other improvements in the methodology and quality of results[10].

Figure 7.2 Preliminary general TIAH findings

(a) The number of agricultural households (where the main income of the reference person comes from farming) is substantially smaller than the number of households where there is some income from farming, and generally smaller than the number of agricultural holdings.

(b) Where data exist over time, absolute numbers of agricultural households have been falling, in some instances very rapidly.

(c) On average, households with an agricultural holding but where farming is **not** the main income source of the reference person appear to derive little income from farming; their average disposable income can be greater or smaller than incomes of agricultural households, depending on the country in question.

(d) Agricultural households ("narrowly" defined) in all countries are recipients of substantial amounts of income from outside agriculture. Though typically about a half to two thirds of the total comes from farming, there are large differences between Member States and some between years.

(e) The total income of agricultural households is more stable than the income from farming alone. Non-agricultural income (taken together) is less variable from year to year than is farming income. Disposable income seems to be less stable than total income, but the relationship between the two depends on a variety of factors, including the way that taxation is levied.

(f) Countries differ in the share of income taken from agricultural households in taxation and other deductions, so the same average total income figure can imply different levels of disposable income in different Member States.

(g) Agricultural households have average disposable incomes per household that are typically higher than the all-household average. The relative position is eroded or reversed when income per household member or per consumer unit is examined.

Main findings

Results on a country-by-country basis were given in the TIAH 1992 Report and will be updated in the 1995 Report. In these publications, the degree of detail in the analysis is matched to the state of TIAH statistics in

10 In addition to the results coming from Member States using the agreed methodology, Eurostat has commissioned some studies to explore the implications of adopting alternative definitions of agricultural households, of income averaging etc. from selected Member States with suitable basic data.

each country and attention is drawn to the disparities which remain between Member States in the methodologies they employ. These detailed results and warnings will not be repeated here. Nevertheless, there are some preliminary general findings that are of direct importance to decision-making under the CAP and other EU policies. A summary is given in Figure 7.2. Some are based on results from all Member States while others depend on the greater quantity of information available in a minority but which, nevertheless, are likely to be found throughout the EU.

This chapter enlarges on only four of the possible areas of analysis - the implications of applying the TIAH definition of what constitutes an agricultural household on the numbers of households covered, the composition of the total income of these agricultural households (at this stage concentrating on figures for a single year), the relative stability over time of the income from farming and total income, and comparisons of average disposable income between agricultural households and the entire households sector.

Numbers of agricultural households

It is clear that the number of households that satisfy the TIAH definition of an agricultural household is much smaller, in most countries, than the number of holdings shown in the Farm Structure Survey. This is apparent from Table 7.1, where a common year has been chosen (1987). For the EU as a whole, the number of agricultural households is less than half the number of holdings. In some countries (notably Italy, Spain and Portugal) the number of agricultural households is particularly low in relation to the number of holdings, implying that on two-thirds or more of holdings there are no households whose reference person (head) has farming as the main income source (or occupation). However, the correspondence between holding and

Table 7.1 Comparison of numbers of agricultural holdings in the EC Farm Structure Survey with numbers of agricultural households (TIAH "narrow" definition). 1987

Member State	No. agricultural holdings x 1000	No. agricultural households x 1000	No. agricultural households as percentage of no. holdings
Belgium	93	66	71
Denmark	87	**69	71
Germany	705	342	49
Greece	953	405	42
Spain	1 792	*641	36
France	983	660	67
Ireland	217	85	39
Italy	2 784	736	26
Luxembourg	***3.8	***2.7	71
Netherlands	132	**87	66
Portugal	636	191	30
United Kingdom	260	261	100
Sum of the above	**8 646**	**3 555**	**41**

*** 1986 ** 1988 *** 1989**

Notes:

(1) TIAH definition of an agricultural household is one where the main income source of the reference person is from independent activity in agriculture (farming). Not all Member States are fully harmonized on this definition. For example, France classifies according to the self-declared main occupation of the reference person, which is a subjective judgement that may include both time and income components.

(2) An agricultural holding may have no agricultural household associated with it, one or more than one (such as on large farms where there are several households headed by self-employed farmers, who may be partners).

(3) The UK is unusual in that its number of holdings and agricultural households coincide; though there are many holdings (mainly small) without an agricultural household, there are many others (usually larger holdings) with more than one. The number of agricultural households in the UK is taken from the Survey of Personal Incomes. This probably under-estimates the real number because it does not cover farmers whose farms are arranged as companies.

Source: 1987 Farm Structure Survey and Eurostat's TIAH database.

household is not exact, and on some (typically large) holdings there may be more than one agricultural household. This and other technical factors help explain why in the United Kingdom the numbers of holdings and agricultural households are almost the same, despite the known existence of many smaller holdings where there is no household that satisfies the definition of being an agricultural one.

Because of the non-correspondence between agricultural holdings and households, a preferable approach is to compare the numbers of households that satisfy the "narrow" definition with those of households where least one member has ***some*** income from farming (that is, the "broad" definition). This also throws some light onto the households that are outside the former definition but inside the latter, which might be called "marginal" agricultural households. Only three countries can provide such information at present (Ireland, Netherlands and Germany, though each for only one year); numbers of households and average income levels are presented in Table 7.2. Caution has to be exercised because the figures relate only to single years. While in each country the use of the "broad" definition expands the number of agricultural households compared with the numbers which qualified under the "narrow" definition, the extent varies substantially; the number of "narrow" households as a percentage of "broad" households was 41% in Ireland (1987), 64% in the Netherlands (1988) and 58% in Germany (1983).

Table 7.2 Number of households and levels of average disposable income for three groups of agricultural households. Ireland, Netherlands, Germany

	Ireland (1987)	Netherlands (1988)	Germany (1983)
No. agricultural households (000)			
"broad"	207	136	613
"narrow"	84	87	353
"marginal"	122	49	260
Disposable income per household			
All households	100	100	100
Agricultural households			
"broad"	105	210	110
"narrow"	128	267	105
"marginal"	89	108	118
Disposable income per household member			
All households	100	100	
Agricultural households			
"broad"	98	138	
"narrow"	113	175	
"marginal"	87	75	
Disposable income per consumer unit			
All households	100	100	
Agricultural households			
"broad"	101	167	
"narrow"	118	211	
"marginal"	89	85	

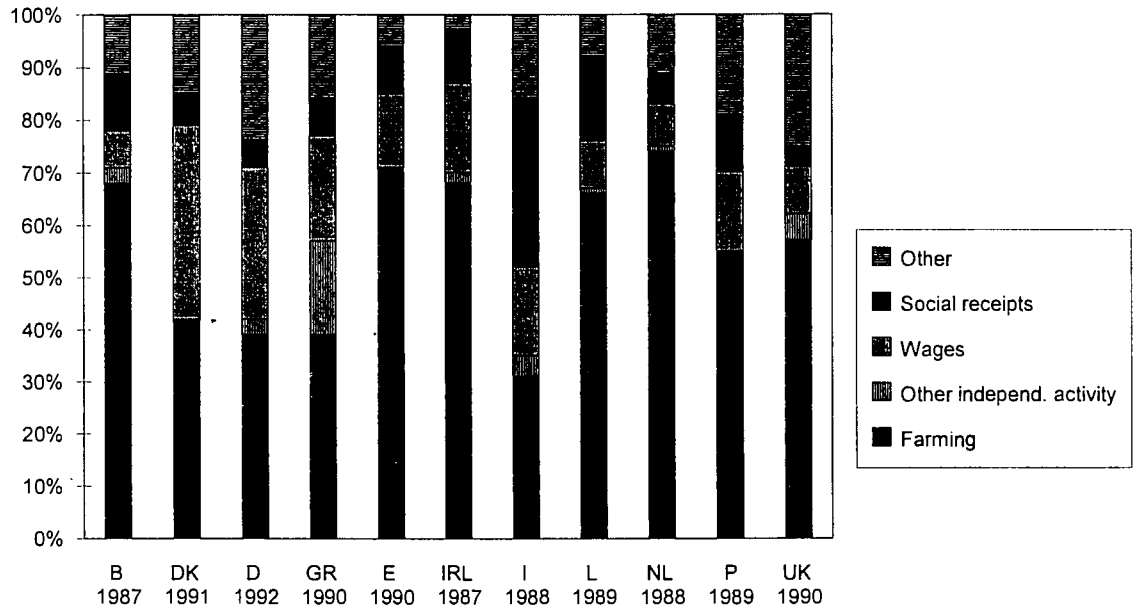
Note: The definitions of the three groups of agricultural household are:
"narrow" - main source of income of the reference person is independent activity in agriculture.
"broad" - where any member of the household has some income from independent activity in agriculture
"marginal" - households which satisfy the "broad" definition but not the "narrow" definition.

Perhaps of even greater importance are the different impacts the "marginal" households (which derive some income from farming but where farming is not the main source of income of the reference person) have on average income levels. In Ireland and the Netherlands they lowered the average household net disposable income (by 18% and 21% respectively), implying that the "marginal" households had lower average incomes than agricultural households narrowly defined (though in the Netherlands they were still above the national all-households average). However, in Germany they raised the average income of agricultural households by 5%, implying that the marginal households had incomes which were on average higher than households that satisfied the "narrow" definition. Such diversity should prevent any quick assumptions about the relative results from using the alternative approaches and points to the need for both "narrow" and "broad" results to

be available from each Member State. The differing social, economic and agricultural structures seem likely to require countries to be considered individually, at least until more comprehensive information is available.

In countries where TIAH results are available for a run of years, it is clear that the number of agricultural households has been in decline. In Germany the fall was from 349.000 households in 1984 to 267.000 in 1992 (- 23%) against an overall rise (+16%) in the total number of private households. In France numbers fell even faster, with a fall of more than a quarter (-27%) in the number of agricultural households in the seven-year period 1984-1990 against a background of a 7% increase in the total number of households. In Portugal the fall in agricultural household numbers between 1980 and 1989 was 27%. Interpretations of income movements over time must recognise that the agricultural households group is not of a constant composition but is changing and contracting.[11]

Graph 7.1 Composition of total personal income of agricultural households by source (selected Member States). Per cent.



Notes:
(I) Results for the Netherlands and Denmark are based on the household as the unit of classification (rather than the reference person).
(2) In France problems of comparability arise because of the way in which social contributions are treated.
(3) In the UK the current data source does not cover households with holdings arranged as corporate businesses, and there are other statistical problems that should preclude direct comparisons with other Member States..
(4) "Other" includes income from property, imputed value of domestic dwelling, and other miscellaneous current transfers.
(5) For Germany figures for 1992 are taken; although 1993 results are available, they are subject to substantial revision.

Composition of income

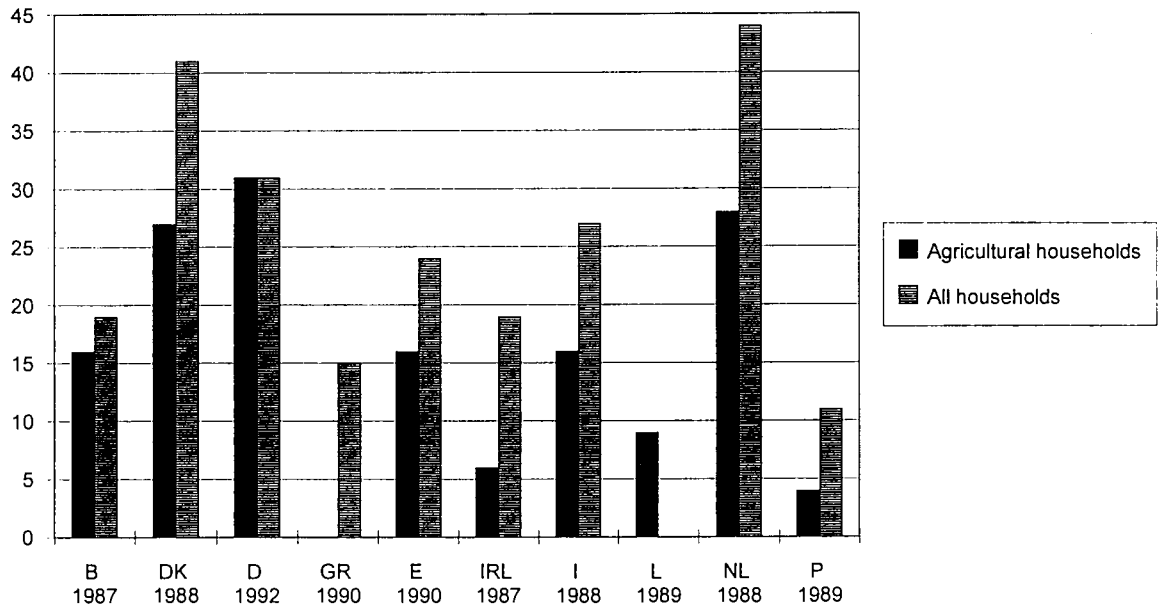
Any consideration of income results must, at this stage, bear in mind that full harmonisation in methodology has not yet been achieved among Member States and that gaps in the data exist. Results should therefore be regarded as indicative and, in the case of some countries, experimental. Nevertheless the they show that, in all countries, agricultural households ("narrow" definition) are recipients of substantial amounts of income from outside agriculture. Typically only about a half to two-thirds of the households' total income comes from farming, though there are substantial differences between Member States and resulting from using

11 Over the same periods the declines in the total labour input to agriculture (measured in Annual Work Units) were Germany -26%, France -20% and Portugal -26%.

alternative systems of household classification (See Graph 7.1). In the years shown countries in which less than half of the total household income came from farming included Denmark, Germany, Greece and Italy. At the other end of the spectrum, with more than two thirds coming from farming but still with a substantially minority of their income coming from other sources, were Belgium, Spain, Ireland, Luxembourg and the Netherlands. It follows that the overall income situation of agricultural households cannot be described satisfactorily by taking only income from farming.

Countries also differ in the amounts of household income taken in taxation and other deductions, so the same average total income figure can imply different levels of disposable income in different Member States. At one extreme was Denmark, Germany and the Netherlands, where more than a quarter was taken, and at the other Portugal and Greece, with less than 10 per cent (see Graph 7.2). The proportion of total income that was taken by deductions was lower (often much lower) among agricultural households than among households in general in each country

Graph 7.2 Percentage of total income taken by taxation and social contributions, agricultural households and all households (selected Member States).



Note: In Greece among agricultural households less than 1% of total income was taken by these items. See also the notes to Graph 7.1

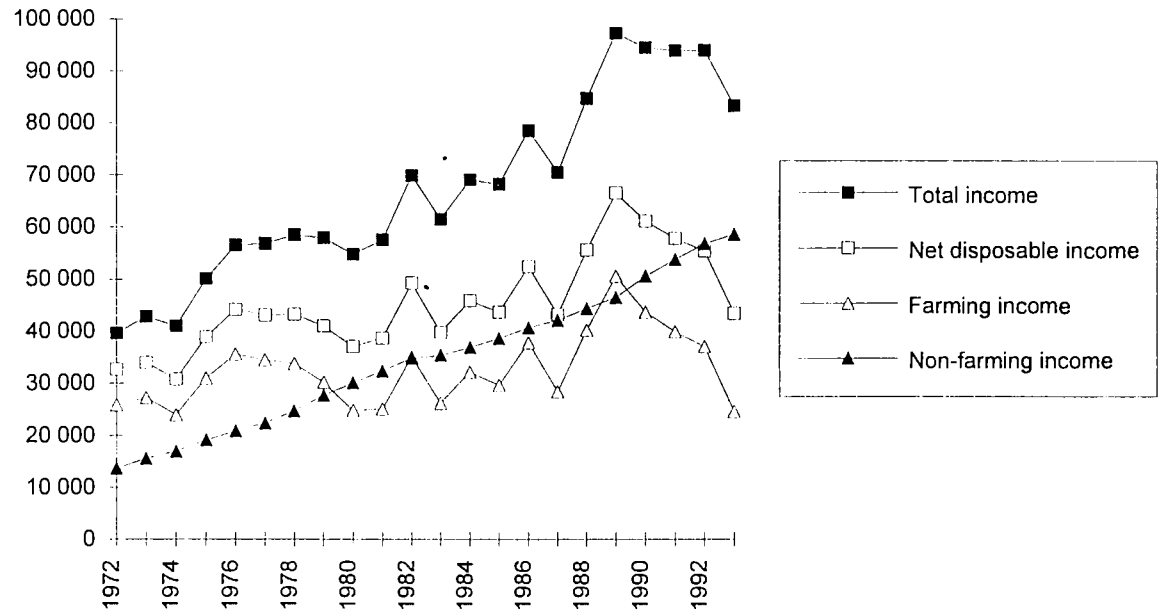
Stability of income

There is evidence from several countries that total household income is more stable than the income from farming. Non-agricultural income (taken all together) is less variable from year to year than is farming income (though this is not a necessary condition for total income to be more stable). Disposable income seems to be less stable than total income; a variety of factors are operating here, including the way that taxation is levied. The conclusion is that year-to-year changes in agricultural income should not be taken to imply a similar movement in the incomes that agricultural households have at their disposal.

This point will be described in detail in the *Total Income of Agricultural Households 1995 Report*. Purely for the purpose of illustration here, Graph 7.3 shows the development in total income, the incomes from farming and from non-farming sources and disposable income for Germany (as constituted prior to October 3rd 1990), the Member State with the longest time series in the TIAH database. It is obvious that the income per household from farming was much less stable than that from other sources (which showed a steady rise in nominal DM) and that the fluctuations in total income can be largely attributed to the agricultural component. This implies that, in terms of percentage change from year to year, the variability of total income was less than that of income from farming alone. Graph 7.3 also shows that in Germany the rising level of average

non-farm income contrasted with an income per household from farming that did not increase over the period as a whole, even in nominal DM, and that saw a marked fall in the last five years of the series. For most years since 1979 agricultural households in Germany have received more income from non-farming sources than from farming; this has been particularly so since 1990.

Graph 7.3 Germany: Income per household of agricultural households by major source, 1972-1993. Nominal DM.

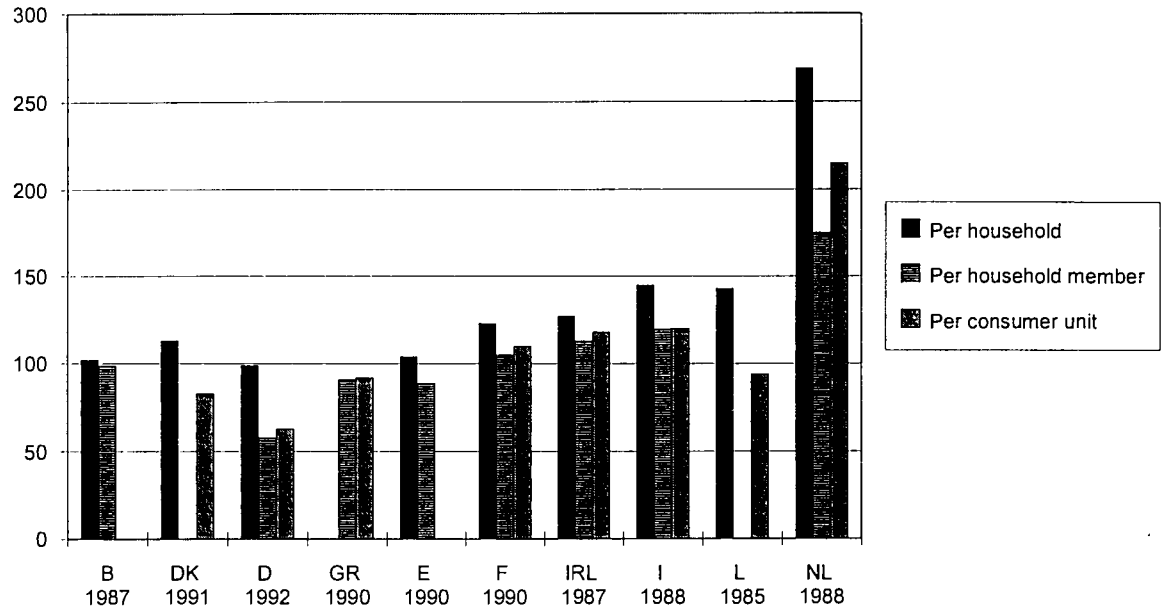


Comparisons of income of agricultural households with the all-households average

Agricultural households appear to compare favourably with the rest of society in terms of their average disposable incomes (comparisons are not possible for every Member State). Their incomes are typically ***higher*** than the all-household average. However, the relative position is eroded or reversed when income per household member or per consumer unit is examined (Graph 7.4). Agricultural households on average have lower incomes than households headed by other self-employed reference persons. These observations, of course, do not imply necessarily that as a group, agricultural households need support to lift them from poverty. However it should be recalled that, despite the stabilising influence of income from sources other than farming, the relative position of agricultural households can be subject to quite large variations from year to year, so caution must be exercised when considering the results for single years. Other factors also need to be considered, including the distribution of incomes around the group mean.

In Germany, which has information extending over several decades, the relative disposable income situation of agricultural households seems to have been deteriorating over time. The average disposable income per household of agricultural households was above the all-household average in all years from 1972 until 1991, but with a gap that was narrowing. In 1992 their income dipped below the all-household average. In France a decline from 1970 is suggested (though there have been changes in methodology that dictate caution in drawing conclusions). However, in the comparable series from 1984 there was a strong recovery in the relative income position of agricultural households in the last two years for which results are available (1989 and 1990) to a level 23% above the national average, very similar to the position indicated in 1970. These, and other findings, will be documented in the forthcoming *Total Income of Agricultural Households: 1995 Report.*

Graph 7.4 Average disposable income of agricultural households relative to the all-household average. Selected Member States.



Notes:

(i) For Luxembourg, in the absence of a comparison being generated within the TIAH statistics, interim figures taken from a survey of living standards have been substituted.

(ii) Comparisons for Portugal and the United Kingdom are not available.

See also the notes for Figure 7.1

ANNEXES

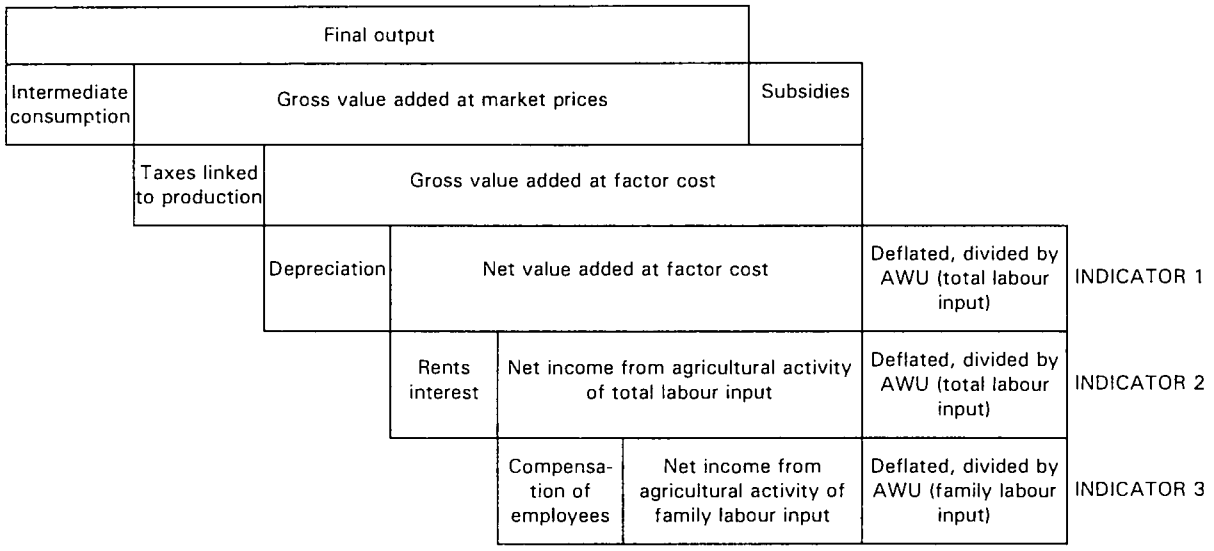
I Notes on methodology

II Detailed tables

I NOTES ON METHODOLOGY

A.1 Income indicators

The estimation of the agricultural income indicators is based on the **Economic Accounts for Agriculture**[1] (EAA), which form part of the European System of Integrated Economic Accounts (ESA). The three Indicators are derived as follows:



The data cover the **branch** "Products of Agriculture and Hunting" which includes all **agricultural output** (defined according to a list of products) resulting from a main or secondary activity, but excludes non-agricultural secondary activities of agricultural holdings. They therefore do not refer to the activity sector "Agriculture", which may be taken to be the total of economic activities of agricultural holdings. Nor are the aggregates and income indicators used in Chapters 2 to 6 of this publication indicative of the total income or disposable income of households engaged in agriculture, since these may receive income from sources other than agriculture (non-agricultural activities, wages or salaries, social benefits, property income) which are only dealt with in Chapter 7 of this report. In other words, **agricultural income** as described and analysed in this report must not be regarded as farmers' income.

It should also be noted that the concept used for assessing production, on which value added and income aggregates naturally depend, is that of **final output**, which in particular results in the exclusion of intra-branch consumption of agricultural products (seeds and animal feedingstuffs produced by the agricultural branch and used directly by it).

This concept of final output, and the income aggregates to which it leads, may differ in some cases from those used in the calculations and estimates made by the Member States for their own purposes. For example, some Member States use the concept of "deliveries", which implies inclusion of the output supplied in the course of the year (either sold or used for own consumption) even if it was produced in a previous year; the income indicator resulting from it therefore measures the income actually received during the year. The concept of final output, by contrast, is used for measuring **income generated by the year's output,** even if the corresponding payments are not received until later in some cases; this result is obtained by summing to sales and own-consumption additions to stocks and own-account produced fixed capital goods, and deducting from them withdrawals from stocks. It should also be noted that the income indicators in this report relate to **calendar years**, which goes some way to explain the substantial differences between these figures and those in a number of national publications, which are based on the farm year. Other variances may result from a different list of the deductions operated on the value of output in order to calculate income.

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1 cf.Eurostat: *"Manual on Economic Accounts for Agriculture and Forestry"*, Theme 5, Series E, Luxembourg 1989 (and *Addendum*, 1989), and *"Economic Accounts for Agriculture and Forestry"* 1987-1992, Theme 5, Series C, Luxembourg 1994.

Finally, since harmonization of the absolute values of income indicators is not yet completed between Member States, the data and analyses of this report are mainly expressions of **annual changes**.

A.2 Agricultural labour input

The volume of labour input or rates of change in it are calculated in **annual work units (AWUs)** to reflect the role of part-time and seasonal work in agriculture. An AWU is equivalent to the time worked by one person employed full-time in agricultural activities on a holding over a whole year[2]. A distinction is made between family AWUs (the holder and members of his family working on the holding) and non-family AWUs (paid workers not belonging to the holder's family), the two added together constituting the total AWUs.

The data published and used in this report for calculating agricultural income indicators are based on the trend in the number of AWUs used in absolute values. Harmonization of time series at European Union level is not yet quite complete, especially as far as the definition of an AWU in hours worked per year is concerned. Furthermore, for some Member States the results have been estimated partly or totally by Eurostat in the absence of complete national data[3].

A.3 Aggregation of European Union data

Indices and rates of change for the European Union as a whole (EUR 12, unless otherwise stated) can be calculated as weighted averages of national indices or rates of change, or calculated directly from European Union aggregates resulting from conversion of national data into ECUs (or PPSs). In both cases, a base year has to be chosen: the one used for establishing the different countries' share in the calculation of European Union averages, or the one taken for the rates of change used for calculating aggregates.

In this report, the calculations for the short-term (changes in 1994 compared with 1993) and long-term (trends from 1980 to 1994) sections are based on slightly different methods and on different base years.

For the **short-term section** (Chapters 2 and 3, and Tables A.3 to A.7 of Annex II), the rates of change of the volumes and nominal or real values of the European Union for 1994 compared with 1993 have been calculated as **weighted averages** of the corresponding rates of change estimated in the Member States. The weighted coefficients have been calculated from **EAA data for 1993**, converted into ECUs at **1993 exchange rates**; clearly, these coefficients are specific to each item. Rates of change of nominal or real prices have been deduced from those of values and volumes. All in all, this method, which is based on 1993, appears the most logical for short-term analysis and the most consistent with that used in the Member States for calculating rates of change in volumes and prices in 1994 for mixed product groups.

For the **long-term section** (Chapters 4 and 5, and Tables A.8 et seq. of Annex II), income indices and rates of change of volumes and values for the European Union have been calculated from **European Union aggregates expressed in ECUs at constant 1990 exchange rates;** for real values, **the deflators are also based on 1990 = 100.** The indices and rates of change of prices are deduced from the corresponding values and volumes. This method based on 1990 appears the most logical one for describing and analysing trends for the whole of the period 1980-1994. For consistency, the EAA uses 1990 constant prices in the calculation of indices and changes in the volume and price for each Member State. It should also be noted that indices (especially the three agricultural income indicators) are expressed as base "1990" = 100[4].

A.4 Calculation of deflated series

For each Member State, **indices and changes in the prices and values in real terms** of different products, aggregates and indicators are obtained by deflating the corresponding nominal figures with the **implicit price index of gross domestic product at market prices.** For long-term series, use is made of the GDP price index with base 1990 = 100. For short-term changes (1994 compared with 1993), forecasts of this index for 1994 were supplied by the Commission's Directorate-General for Economic and Financial Affairs (DG II).

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2 cf. Eurostat: *"Structure of Holdings - Community Survey Methodology"*, Theme 5, Series E, Luxembourg 1986 (p. 21).

3 The countries concerned are Ireland for the entire series (until 1991), and Denmark (1973-1980) and Portugal (1973-1978 respectively).

4 It should be recalled that "1990" throughout this report means (1989+1990+1991)/3, an operation aimed at choosing a base year which is hardly affected by short-term fluctuations.

There are a number of important points in favour of using this deflator, such as its reliability and comparability. The GDP implicit price index is an indicator of trends in the general level of prices of all goods produced and all services rendered in an economy. The price index of national final "uses" could also be used as a deflator. Unlike the GDP price index, it also directly takes account of the effect of external trade and thus reacts faster and less ambiguously to price changes for imports (e.g. energy price changes). However, to ensure comparability with other Commission publications, it was decided not to introduce a new deflator.

Real values for the European Union as a whole are calculated by deflating each Member State's nominal figures (at current prices) with the GDP implicit price index of the country concerned and converting the results into ECUs (at 1990 exchange rates for the long-term and 1993 exchange rates for the short-term as indicated above). The results are then added together to give real values for the European Union. These aggregates, in real terms, are used for calculating indices and rates of change for EUR 12 and therefore there is never any explicit application of a "European Union deflator". In particular, it is the European Union income aggregates in this deflated form expressed in 1990 ECUs, that are set against the number of annual work units in the European Union as a whole in order to calculate the trend of income indicators since 1973 for EUR 11 and since 1980 for EUR 12. As an example, the following algorithm is used to calculate Indicator 1 for the European Union :

$$IND1_{EU,t} = \frac{\sum_i \frac{NVA_{i,t}}{PGDP_{i,t} \times ER_{i,90}}}{\sum_i TLI_{i,t}},$$

where:IND 1=Indicator 1 (in ECUs per AWU);

NVA=Net Value Added at factor cost for agriculture (in national currency);

PGDP=Implicit Price index of Gross Domestic Product at market prices (1990=100);

ER=Exchange Rate (1ECU = ...N.C.);

TLI=Total Labour Input of agriculture (in AWU's);

i=Member State (B...UK);

t=Year (1973...1994).

Finally, it should be noted that this method renders unnecessary the calculation of a deflator for the European Union as a whole and therefore none is given in this publication. However, it should be noted that the "average rate of inflation for the European Union" which could be derived from the above-mentioned real values (a rate which would in fact differ according to the product or aggregate chosen for calculating it) would not correspond to the figures in the Commission's other publications for the average change in the implicit price index of gross domestic product in the European Union (as this rate of change is generally calculated from each Member State's share in the European Union's GDP expressed in PPS).

II DETAILED TABLES

Table A.1

Share of gross value added at market prices of agriculture in net domestic product at market prices (in %)

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	3.6	5.6	2.5	:	16.9	9.0	6.1	15.8	7.2	3.5	4.9	:	2.4	:	:
1980	2.1	4.1	1.6	:	14.7	6.1	3.8	10.2	5.5	2.1	3.3	6.4	1.7	3.4	:
1985	2.1	4.2	1.4	:	14.4	5.3	3.4	8.3	4.2	2.2	3.9	5.2	1.4	3.0	:
1990	1.8	3.6	1.1	:	10.8	4.0	2.9	6.9	3.0	1.7	3.8	3.6	1.1	2.4	:
1993	1.5	2.4	:	0.9	9.5	2.8	2.0	6.4	2.7	1.2	3.0	1.9	0.9	:	1.8

(1) With Germany in its boundaries prior to 3 october 1990.

(2) With Germany in its boundaries after 3 october 1990.

Table A.2

Agricultural employment (1) as a share of total employment (in %)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR12
1973	4.0	9.4	7.2	:	23.6	10.9	23.9	17.8	8.0	6.0	:	3.0	:
1980	3.1	8.0	5.2	28.7	18.6	8.3	18.1	13.9	5.5	4.8	28.0	2.7	9.4
1985	3.1	7.0	4.5	27.5	17.7	7.0	15.8	10.9	4.3	4.8	22.4	2.5	8.2
1987	2.9	6.3	4.1	25.7	14.7	6.5	15.0	10.2	3.9	4.8	21.2	2.4	7.5
1988	2.8	6.0	3.9	25.3	14.0	6.2	15.1	9.6	3.7	4.7	20.6	2.4	7.2
1989	2.7	5.6	3.7	24.1	12.7	5.8	14.9	9.1	3.5	4.6	18.8	2.2	6.7
1990	2.7	5.6	3.5	22.8	11.5	5.5	14.9	8.6	3.3	4.5	17.7	2.2	6.3
1991	2.6	5.4	3.3	21.1	10.4	5.3	13.7	8.3	3.1	4.5	17.4	2.3	6.1
1992	2.5	5.4	3.1	20.8	9.9	5.1	13.4	8.0	3.0	3.8	11.4	2.2	5.7
1993	2.5	5.4	3.0	20.3	9.9	4.9	12.6	7.4	3.0	3.8	11.5	2.2	5.4

(1) Including Forestry and Fishing.

Table A.3

Percentage change in volume of 1994 over 1993

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
+	Final crop output	-6.7	-1.8	0.0	5.3	-4.3	0.6	0.8	-3.3	0.2	0.2	5.1	-1.5	-1.1
	Cereals	-1.0	2.6	2.7	22.3	-16.9	-6.8	-8.8	-4.2	-12.2	-7.7	4.2	1.2	-3.1
	Potatoes	-34.5	-9.0	-30.9	-4.0	2.5	-5.7	9.8	-7.2	-37.3	-7.5	8.3	-6.2	-12.0
	Sugarbeet	-15.0	-13.2	-15.3	-7.9	-7.2	-10.6	27.2	12.0	-	-19.0	-	-10.8	-9.5
	Industrial crops	6.2	-6.7	3.7	7.3	-4.8	26.0	-	-3.5	13.6	32.5	41.7	8.8	8.3
	Oilseeds and oleaginous fruit (excluding olives)	44.0	-6.7	5.6	5.2	-19.0	27.8	-	30.0	13.6	50.0	0.0	10.2	13.5
	Fresh vegetables	-1.0	-14.9	-4.8	1.9	3.1	2.9	6.1	-1.3	-11.8	-5.5	1.0	-1.5	-0.1
	Fresh fruit (with citrus fruit, tropical fruit and grapes)	-11.6	-6.1	3.8	-2.2	-3.2	18.0	15.6	1.9	81.9	-6.5	-3.5	-7.8	1.8
	Grape must and wine	-	-	22.5	-18.1	-31.7	2.0	-	-10.5	3.4	-	0.0	-	-2.0
	Olive oil	-	-	-	17.7	-11.7	-	-	-16.3	-	-	38.7	-	-7.1
	Flowers and ornamentals	0.0	-0.6	3.4	0.0	0.0	0.0	-	-2.7	-	3.0	-	4.1	1.3
+	Final animal output	-0.5	-0.8	-4.3	-0.1	1.5	0.2	-1.5	0.8	-1.1	-1.2	-1.7	2.2	-0.6
	Animals	-0.5	-1.3	-8.2	-1.0	1.8	-0.5	-2.5	1.8	0.8	-1.4	-2.7	2.9	-1.1
	Cattle (including calves)	0.0	-6.1	-13.6	-2.8	4.5	-2.6	-3.7	1.7	-2.1	1.7	-20.0	5.9	-2.7
	Pigs	-3.0	1.0	-4.5	-3.1	-2.3	0.3	1.0	1.6	10.9	-3.0	5.0	2.8	-1.3
	Sheep and goats	5.0	0.0	-30.5	0.2	7.9	-2.9	-7.1	1.0	-	-36.5	4.0	-0.7	-0.3
	Poultry	9.0	0.0	3.3	0.6	2.1	4.0	11.0	2.1	-5.1	-1.5	2.0	0.7	2.6
	Animal products	-0.7	0.0	-0.2	0.8	0.9	1.2	0.2	-1.0	-2.5	-0.9	0.3	1.2	0.2
	Milk	-2.0	-0.4	-0.1	1.4	-3.5	1.0	0.4	-1.2	-2.6	-1.5	-1.1	1.1	-0.2
	Eggs	5.5	3.3	3.0	-1.6	13.1	4.0	-5.9	-0.3	-0.3	3.0	5.0	1.8	3.8
=	Final output	-3.1	-1.1	-2.7	3.7	-1.8	0.4	-1.2	-1.7	-0.9	-0.6	0.7	0.7	-0.8
	Seeds and seedlings	0.0	0.0	-3.1	0.0	2.5	4.0	3.7	0.8	1.7	15.0	-	0.3	3.1
	Energy and lubricants	0.0	0.0	-1.9	2.3	0.2	-2.0	2.2	1.2	-2.0	-1.5	5.1	1.9	-0.4
	Fertilizers and soil improvers	-2.0	-2.2	-3.2	0.0	21.0	-2.5	-1.8	1.5	-7.8	-2.0	-	6.8	1.0
	Plant protection products	-2.5	-5.0	-0.1	2.5	11.2	6.0	-0.8	0.5	-2.5	-3.0	-8.4	-5.0	1.9
	Feedingstuffs	2.0	-2.8	-1.6	-1.1	3.6	3.3	10.7	0.4	6.3	-1.0	-2.6	2.1	1.2
	Material and small tools ; maintenance and repairs	0.0	0.0	-3.0	1.7	3.0	-5.0	4.9	0.2	-1.6	0.0	-6.8	-4.7	-1.6
	Services	0.0	0.0	-1.2	3.0	7.3	0.0	-1.3	0.2	-	0.0	0.5	-1.7	-0.1
-	Intermediate consumption	0.7	-1.3	-1.9	1.1	4.2	1.3	5.7	0.6	0.3	0.1	-1.8	0.5	0.6

Table A.4

Percentage change in nominal prices of 1994 over 1993

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
+	Final crop output	15.6	1.4	6.0	13.2	13.7	3.6	5.3	2.4	-2.1	11.3	11.2	4.5	6.7
	Cereals	-3.0	-6.6	-5.1	4.4	-1.3	1.2	-11.2	-8.2	-0.8	-2.2	-9.5	-9.3	-3.6
	Potatoes	183.5	35.6	75.6	43.0	74.2	55.4	44.8	47.5	25.0	92.0	58.1	80.3	72 9
	Sugarbeet	2.0	4 9	3.0	5.4	1.1	6 9	0.5	6.0	-	7.0	-	-1.6	4.0
	Industrial crops	0.0	8.9	10.0	3.7	4.3	-3.2	-	9.6	-0.8	-3.8	-3.7	-3.4	3.1
	Oilseeds and oleaginous fruit (excluding olives)	0.0	8.9	11.2	4.9	2.7	-6.1	-	9.5	-0.8	-14.0	-5.1	-4.0	0.8
	Fresh vegetables	2.3	19.7	17.2	16.0	5.5	4.2	5.0	1.2	-2.2	15.8	-4.6	7.4	6.2
	Fresh fruit (with citrus fruit, tropical fruit and grapes)	25.6	-11.7	7.2	22.1	24.9	-0.9	17.1	1.9	-4.6	17.8	9.9	0.4	9.8
	Grape must and wine	-	-	2.0	11.6	38.6	10.9	-	2.5	-4.4	-	22.7	-	9.1
	Olive oil	-	-	-	21.6	19.6	-	-	8.4	-	-	18.8	-	15.8
	Flowers and ornamentals	4.0	3.7	0.0	17.8	10.0	-5.5	-	6.5	-	-0.6	-	12.8	2.1
+	Final animal output	-1.0	1.8	-1.4	13.4	6.4	-0.4	-0.7	1.7	-1.7	-1.7	2.7	-0.7	0.6
	Animals	0.4	3.2	0.6	5.6	6.7	-0.1	-0.6	-0.4	0.7	1.3	2.6	-2.3	0.9
	Cattle (including calves)	-1.0	6.2	-2.1	8.4	5.2	0.1	-1.4	2.6	0.7	-1.6	8.5	-5.8	-0.2
	Pigs	1.5	2.4	4.5	5.1	7.2	2.0	4.7	-5.3	0.2	3.8	7.8	-3.5	2.4
	Sheep and goats	6.6	0.0	6.2	5.7	8.8	2.2	6.5	-1.2	-	10.5	2.8	6.9	6.0
	Poultry	1.8	-1.8	-5.8	2.5	5.1	-1.0	-2.5	-1.1	0.0	-0.5	-9.5	-1.5	-1.0
	Animal products	-4.5	-0.8	-3.4	22.0	5.9	-0.9	-0.8	5.4	-3.6	-5.0	3.0	1.3	0.1
	Milk	-1.7	-0.9	-3.3	26.2	12.0	0.0	-1.3	5.4	-3.7	-4.3	9.4	1.2	0.8
	Eggs	-17.9	1.4	-5.8	7.2	-8.3	-10.0	6.6	5.9	0.0	-10.5	-17.0	1.7	-4.7
=	Final output	5.2	1.6	1.5	13.2	10.4	1.6	0.0	2.1	-1 8	4.0	6.6	1.3	3.5
	Seeds and seedlings	1.0	0.2	-1.5	0.6	6.8	-8.7	4.9	4.6	-0.5	-9.0	-	1.3	-3.9
	Energy and lubricants	2.0	-1.2	3.2	2.7	-2.6	-2.0	-2.0	-5.9	0.7	-2.2	-3.5	0.0	-0.5
	Fertilizers and soil improvers	2.0	-1.7	1.7	11.0	6.6	1.0	-1.3	8.9	-2.1	2.0	-	4.4	3.2
	Plant protection products	-1.0	-7.3	-4.0	10.6	4.9	-0.5	3.4	5.0	2.0	-2.6	20.2	2.0	1.4
	Feedingstuffs	-2.0	-4.0	-5.3	9.7	1.4	-2.0	0.2	0.3	-2.0	-2.7	2.1	-1.5	-1.5
	Material and small tools ; maintenance and repairs	3.0	5.0	3.2	12.9	1.2	3.0	1.1	4.0	2.5	2.0	-4.3	1.7	2.8
	Services	3.0	1.6	4.5	12.6	5.3	1.0	4.0	4.0	-	2.0	5.2	2.3	2.9
-	Intermediate consumption	0.2	-1.8	0.3	8.0	2.3	-1.3	0.3	1.3	0.2	-1.4	3.8	0.3	0.3

Table A.5

Percentage change in real price of 1994 over 1993

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
+	Final crop output	13.5	-0.2	3.1	2.2	9.8	2.0	2.3	-1.0	-4.8	9.3	5.8	2.4	3.5
	Cereals	-4.7	-8.1	-7.7	-5.7	-4.7	-0.5	-13.7	-11.3	-3.5	-4.0	-14.0	-11.2	-6.2
	Potatoes	178.5	33.4	70.8	29.1	68.4	53.0	40.7	42.6	21.6	88.6	50.4	76.6	68.0
	Sugarbeet	0.2	3.2	0.2	-4.8	-2.3	5.2	-2.3	2.5	-	5.1	-	-3.7	1.3
	Industrial crops	-1.8	7.2	7.0	-6.3	0.9	-4.7	-	6.1	-3.5	-5.5	-8.4	-5.3	-1.8
	Oilseeds and oleaginous fruit (excluding olives)	-1.8	7.2	8.2	-5.2	-0.8	-7.6	-	5.9	-3.5	-15.5	-9.7	-5.9	-1.5
	Fresh vegetables	0.5	17.8	14.0	4.8	1.9	2.6	2.1	-2.1	-4.9	13.8	-9.2	5.3	3.0
	Fresh fruit (with citrus fruit, tropical fruit and grapes)	23.4	-13.1	4.2	10.3	20.7	-2.5	13.8	-1.5	-7.2	15.7	4.6	-1.7	5.9
	Grape must and wine	-	-	-0.7	0.8	34.0	9.2	-	-0.9	-7.1	-	16.7	-	6.5
	Olive oil	-	-	-	9.8	15.5	-	-	4.8	-	-	13.0	-	10.0
	Flowers and ornamentals	2.2	2.0	-2.7	6.4	6.2	-7.0	-	3.0	-	-2.4	-	10.5	-0.3
+	Final animal output	-2.8	0.1	-4.1	2.4	2.8	-2.0	-3.4	-1.7	-4.4	-3.4	-2.3	-2.8	-2.0
	Animals	-1.4	1.6	-2.1	-4.7	3.1	-1.7	-3.4	-3.7	-2.0	-0.5	-2.3	-4.3	-1.7
	Cattle (including calves)	-2.8	4.5	-4.8	-2.1	1.6	-1.5	-4.1	-0.8	-2.0	-3.3	3.2	-7.7	-2.7
	Pigs	-0.3	0.8	1.7	-5.1	3.6	0.4	1.8	-8.4	-2.5	2.0	2.6	-5.5	-0.1
	Sheep and goats	4.7	-1.6	3.3	-4.5	5.1	0.6	3.5	-4.4	-	8.5	-2.2	4.7	2.1
	Poultry	0.0	-3.3	-8.5	-7.4	1.5	-2.6	-5.3	-4.4	-2.7	-2.3	-13.9	-3.5	-3.6
	Animal products	-6.2	-2.3	-6.1	10.2	2.2	-2.4	-3.6	1.9	-6.2	-6.7	-2.1	-0.8	-2.5
	Milk	-3.4	-2.5	-5.9	14.0	8.2	-1.6	-4.1	1.9	-6.2	-6.0	4.0	-0.9	-1.8
	Eggs	-19.3	-0.2	-8.4	-3.2	-11.4	-11.4	3.5	2.4	-2.7	-12.1	-21.0	-0.3	-7.4
=	Final output	3.4	0.0	-1.3	2.3	6.6	0.0	-2.8	-1.3	-4.4	2.1	1.4	-0.8	0.6
	Seeds and seedlings	-0.8	-1.4	-4.2	-9.1	3.2	-10.1	2.0	1.1	-3.2	-10.6	-	-0.8	-6.1
	Energy and lubricants	0.2	-2.8	0.4	-7.2	-5.9	-3.5	-4.8	-9.0	-2.0	-3.9	-8.2	-2.1	-3.5
	Fertilizers and soil improvers	0.2	-3.2	-1.0	0.3	3.0	-0.6	-4.1	5.3	-4.7	0.2	-	2.2	0.6
	Plant protection products	-2.7	-8.7	-6.7	-0.1	1.3	-2.1	0.5	1.5	-0.7	-4.3	14.4	-0.1	-1.2
	Feedingstuffs	-3.7	-5.5	-7.9	-0.9	-2.0	-3.5	-2.6	-3.0	-4.7	-4.4	-2.9	-3.5	-4.0
	Material and small tools ; maintenance and repairs	1.2	3.3	0.4	2.0	-2.2	1.4	-1.7	0.6	-0.4	0.2	-8.9	-0.5	0.1
	Services	1.2	0.0	1.7	1.7	1.8	-0.6	1.1	0.6	-	0.2	0.1	0.1	0.6
-	Intermediate consumption	-1.6	-3.4	-2.4	-2.4	-1.1	-2.9	-2.6	-2.0	-2.5	-3.1	-1.2	-1.8	-2.3

Table A.6

Percentage change in nominal value of 1994 over 1993

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
+	Final crop output	7.9	-0.4	6.0	19.2	8.8	4.3	6.1	-1.0	-1.9	11.5	16.8	3.0	5.6
	Cereals	-4.0	-4.2	-2.5	27.8	-18.0	-5.7	-19.0	-12.1	-12.9	-9.8	-5.8	-8.2	-6.6
	Potatoes	85.7	23.3	21.2	37.3	78.6	46.6	59.0	36.9	-21.6	77.6	71.1	69.1	52.2
	Sugarbeet	-13.3	-9.0	-12.8	-3.0	-6.2	-4.4	27.9	18.7	-	-13.3	-	-12.3	-5.9
	Industrial crops	6.2	1.7	14.1	11.3	-0.6	22.0	-	5.8	12.7	27.5	36.5	5.2	11.7
	Oilseeds and oleaginous fruit (excluding olives)	44.0	1.7	17.5	10.3	-16.8	20.0	-	42.4	12.7	29.0	-5.1	5.8	14.4
	Fresh vegetables	1.3	1.9	11.6	18.2	8.8	7.2	11.5	-0.1	-13.8	9.5	-3.6	5.9	6.1
	Fresh fruit (with citrus fruit tropical fruit and grapes)	11.1	-17.1	11.2	19.4	20.9	16.9	35.4	3.8	73.5	10.1	6.1	-7.4	11.8
	Grape must and wine	-	-	25.0	-8.6	-5.3	13.1	-	-8.3	-1.2	-	22.7	0.0	6.9
	Olive oil	-	-	0.0	43.1	5.6	-	-	-9.3	-	-	64.7	0.0	7.6
	Flowers and ornamentals	4.0	3.0	3.4	17.8	10.0	-5.5	-	3.6	-	2.4	-	17.4	3.5
+	Final animal output	-1.5	0.9	-5.7	13.2	8.0	-0.3	-2.1	2.5	-2.8	-2.9	1.0	1.4	0.0
	Animals	-0.1	1.9	-7.6	4.5	8.6	-0.6	-3.1	1.4	1.5	-0.2	-0.1	0.6	-0.2
	Cattle (including calves)	-1.0	-0.3	-15.5	5.4	9.9	-2.5	-5.0	4.3	-1.4	0.0	-13.2	-0.2	-2.9
	Pigs	-1.6	3.4	-0.2	1.8	4.7	2.3	5.8	-3.8	11.1	0.7	13.2	-0.8	1.1
	Sheep and goats	11.9	0.0	-26.2	5.9	17.4	-0.8	-1.1	-0.2	-	-29.8	6.9	6.2	5.7
	Poultry	11.0	-1.8	-2.8	3.1	7.3	3.0	8.2	1.0	-5.1	-2.0	-7.7	-0.8	1.5
	Animal products	-5.1	-0.8	-3.6	23.0	6.8	0.4	-0.6	4.3	-6.0	-5.9	3.3	2.5	0.3
	Milk	-3.7	-1.0	-3.4	27.9	8.1	1.0	-0.9	4.1	-6.1	-5.7	8.1	2.3	0.6
	Eggs	-13.4	4.7	-3.0	5.5	3.7	-6.4	0.2	5.6	-0.3	-7.8	-12.8	3.6	-1.1
=	Final output	2.0	0.5	-1.3	17.4	8.3	2.0	-1.2	0.4	-2.6	3.4	7.3	2.0	2.6
	Seeds and seedlings	1.0	0.2	-4.6	0.6	9.5	-5.0	8.8	5.4	1.2	4.7	-	1.6	-0.9
	Energy and lubricants	2.0	-1.2	1.3	5.1	-2.4	-4.0	0.1	-4.8	-1.3	-3.7	1.4	1.9	-0.9
	Fertilizers and soil improvers	0.0	-3.9	-1.5	11.0	29.0	-1.5	-3.1	10.5	-9.7	0.0	-	11.5	4.2
	Plant protection products	-3.5	-11.9	-4.1	13.4	16.6	5.5	2.6	5.5	-0.5	-5.5	10.1	-3.1	3.3
	Feedingstuffs	0.0	-6.6	-6.8	8.6	5.1	1.2	10.9	0.7	4.1	-3.7	-0.6	0.5	-0.3
	Material and small tools ; maintenance and repairs	3.0	5.0	0.1	14.8	4.2	-2.1	6.1	4.2	0.8	2.0	-10.8	-3.1	1.1
	Services	3.0	1.6	3.3	16.0	13.0	1.0	2.6	4.2	-	2.0	5.7	0.5	2.8
-	Intermediate consumption	0.9	-3.1	-1.6	9.2	6.6	-0.1	6.0	1.9	0.5	-1.3	1.9	0.8	0.9

Table A.6 (continued)

Percentage change in nominal value of 1994 over 1993

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
=	Gross value added at market prices	3.6	5.0	-0.9	20.5	10.0	4.0	-6.4	-0.2	-5.0	8.3	13.9	3.6	4.2
+	Subsidies	18.9	22.3	3.6	9.4	27.1	15.5	58.4	-4.1	13:2	17.5	72.5	2.5	11.3
-	Taxes linked to production	-26.8	-2.4	-1.8	11.0	1.9	-34.0	-24.9	1.0	0.0	-3.2	7.3	25.4	-12.1
=	Gross value added at factor cost	5.8	8.0	0.4	18.7	13.7	8.4	5.4	-0.8	-1.7	9.3	25.0	3.1	6.1
-	Depreciation	3.0	0.0	1.0	12.0	10.0	0.0	2.8	4.0	1.0	1.0	10.8	0.6	2.3
=	Net value added at factor cost	6.4	11.0	-0.1	19.0	14.0	10.3	5.8	-2.9	-2.7	12.4	27.3	3.7	7.2
-	Rent and other payments in cash or in kind	3.0	0.0	6.2	8.0	10.6	0.0	0.0	-1.4	0.7	3.0	-0.3	1.9	3.9
-	Interest	2.0	1.6	-2.3	4.0	9.3	-2.2	-12.5	-21.4	-9.1	-1.5	-7.4	-10.9	-3.5
=	Net income from agricultural activity of total labour input	7.8	30.7	-0.5	20.7	15.0	12.5	7.7	-0.7	-2.0	17.0	39.8	5.1	9.1
-	Compensation of employees	2.0	-2.5	-	8.0	6.5	-1.3	-0.9	-3.5	3.4	-0.5	4.6	0.7	-
=	Net income from agricultural activity of family labour input	8.6	75.8	-	21.6	17.1	16.9	8.5	1.7	-2.5	26.7	57.8	7.0	-

Table A.7

Percentage change in real value of 1994 over 1993

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
+	Final crop output	6.0	-2.0	3.1	7.7	5.1	2.7	3.1	-4.2	-4.6	9.6	11.2	0.8	2.4
	Cereals	-5.6	-5.7	-5.2	15.4	-20.8	-7.2	-21.3	-15.0	-15.3	-11.4	-10.3	-10.1	-9.0
	Potatoes	82.4	21.4	17.9	24.0	72.6	44.3	54.5	32.4	-23.7	74.5	62.8	65.6	47.9
	Sugarbeet	-14.8	-10.4	-15.2	-12.4	-9.4	-5.9	24.3	14.8	-	-14.8	-	-14.1	-8.3
	Industrial crops	4.3	0.1	11.0	0.5	-4.0	20.1	-	2.3	9.6	25.2	29.8	3.0	6.4
	Oilseeds and oleaginous fruit (excluding olives)	41.5	0.1	14.3	-0.3	-19.6	18.1	-	37.7	9.6	26.7	-9.7	3.7	11.8
	Fresh vegetables	-0.5	0.3	8.6	6.8	5.1	5.5	8.4	-3.4	-16.1	7.5	-8.3	3.7	2.8
	Fresh fruit (with citrus fruit tropical fruit and grapes)	9.1	-18.4	8.2	7.9	16.8	15.1	31.6	0.4	68.8	8.2	0.9	-9.3	7.9
	Grape must and wine	-	-	21.6	-17.5	-8.5	11.3	-	-11.3	-3.9	-	16.7	-	4.3
	Olive oil	-	-	-	29.2	2.0	-	-	-12.3	-	-	56.7	-	2.2
	Flowers and ornamentals	2.2	1.4	0.6	6.4	6.2	-7.0	-	0.2	-	0.6	-	15.0	1.0
+	Final animal output	-3.3	-0.7	-8.3	2.3	4.4	-1.8	-4.9	-0.9	-5.4	-4.6	-3.9	-0.7	-2.6
	Animals	-1.9	0.3	-10.1	-5.6	4.9	-2.2	-5.8	-1.9	-1.3	-1.9	-5.0	-1.5	-2.8
	Cattle (including calves)	-2.8	-1.9	-17.8	-4.8	6.2	-4.0	-7.6	0.9	-4.1	-1.7	-17.4	-2.2	-5.3
	Pigs	-3.3	1.8	-2.9	-8.0	1.2	0.7	2.8	-7.0	8.1	-1.1	7.7	-2.8	-1.4
	Sheep and goats	9.9	-1.6	-28.2	-4.4	13.4	-2.4	-3.9	-3.5	-	-31.0	1.7	4.0	1.8
	Poultry	9.0	-3.3	-5.4	-6.8	3.6	1.3	5.2	-2.3	-7.7	-3.7	-12.2	-2.8	-1.1
	Animal products	-6.8	-2.3	-6.3	11.1	3.2	-1.2	-3.4	0.9	-8.6	-7.6	-1.8	0.4	-2.3
	Milk	-5.4	-2.6	-6.0	15.5	4.4	-0.6	-3.7	0.7	-8.7	-7.4	2.9	0.2	-2.0
	Eggs	-14.9	3.1	-5.6	-4.7	0.2	-7.9	-2.6	2.1	-3.0	-9.5	-17.1	1.5	-3.9
=	Final output	0.2	-1.1	-4.0	6.0	4.7	0.4	-4.0	-2.9	-5.3	1.6	2.1	-0.1	-0.2
	Seeds and seedlings	-0.8	-1.4	-7.2	-9.1	5.8	-6.5	5.7	1.9	-1.6	2.8	-	-0.5	-3.1
	Energy and lubricants	0.2	-2.8	-1.5	-5.0	-5.7	-5.5	-2.7	-7.9	-4.0	-5.4	-3.5	-0.2	-4.0
	Fertilizers and soil improvers	-1.8	-5.4	-4.2	0.3	24.7	-3.1	-5.8	6.9	-12.2	-1.8	-	9.2	1.5
	Plant protection products	-5.2	-13.3	-6.7	2.4	12.7	3.8	-0.3	2.0	-3.2	-7.2	4.8	-5.1	0.7
	Feedingstuffs	-1.8	-8.1	-9.3	-1.9	1.5	-0.4	7.8	-2.6	1.3	-5.4	-5.4	-1.5	-2.8
	Material and small tools ; maintenance and repairs	1.2	3.3	-2.6	3.7	0.7	-3.6	3.1	0.8	-1.9	0.2	-15.1	-5.1	-1.5
	Services	1.2	0.0	0.5	4.8	9.2	-0.6	-0.3	0.8	-	0.2	0.6	-1.6	0.4
-	Intermediate consumption	-0.9	-4.6	-4.3	-1.4	3.0	-1.6	3.0	-1.5	-2.2	-3.1	-3.0	-1.3	-1.7

Table A.7 (continued)

Percentage change in real value of 1994 over 1993

		B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12
=	Gross value added at market prices	1.7	3.3	-3.6	8.9	6.3	2.4	-9.0	-3.5	-7.6	6.4	8.4	1.5	1.0
+	Subsidies	16.8	20.4	0.7	-1.2	22.8	13.6	54.0	-7.2	10.1	15.4	64.1	0.4	8.1
-	Taxes linked to production	-28.1	-3.9	-4.5	0.2	-1.6	-35.0	-27.0	-2.3	-2.7	-4.9	2.1	22.8	-14.6
=	Gross value added at factor cost	3.9	6.3	-2.4	7.2	9.9	6.7	2.4	-4.1	-4.4	7.4	18.9	1.0	2.9
-	Depreciation	1.2	-1.6	-1.7	1.2	6.2	-1.6	-0.1	0.6	-1.8	-0.8	5.4	-1.4	-0.5
=	Net value added at factor cost	4.5	9.3	-2.8	7.5	10.1	8.5	2.8	-6.1	-5.3	10.4	21.2	1.6	3.9
-	Rent and other payments in cash or in kind	1.2	-1.6	3.3	-2.4	6.9	-1.6	-2.8	-4.7	-2.0	1.2	-5.2	-0.2	1.0
-	Interest	0.2	0.0	-5.0	-6.1	5.6	-3.7	-15.0	-23.9	-11.6	-3.2	-11.9	-12.7	-6.1
=	Net income from agricultural activity of total labour input	5.9	28.6	-3.2	9.0	11.1	10.7	4.6	-4.0	-4.7	14.9	33.1	2.9	5.7
-	Compensation of employees	0.2	-4.0	-	-2.4	2.9	-2.9	-3.7	-6.7	0.6	-2.3	-0.5	-1.4	-
=	Net income from agricultural activity of family labour input	6.7	73.0	-	9.8	13.2	15.1	5.5	-1.7	-5.1	24.4	50.1	4.8	-

Table A.8 **Belgique/België**

Major components of the calculation of Indicator 1 (indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	55.6	39.3	141.2	158.5	89.2
1974	48.1	44.3	108.6	152.4	71.3
1975	54.1	49.6	108.8	145.9	74.6
1976	65.2	53.4	122.0	138.8	88.0
1977	55.8	57.4	97.2	132.8	73.2
1978	60.8	59.9	101.3	128.5	78.9
1979	57.3	62.6	91.3	127.9	71.4
1980	60.4	65.0	92.8	122.9	75.6
1981	67.5	68.1	99.0	119.5	82.9
1982	74.6	72.9	102.2	117.2	87.3
1983	84.4	76.9	109.6	116.3	94.3
1984	85.0	80.9	104.9	115.6	90.8
1985	83.9	85.9	97.6	112.8	86.5
1986	83.2	89.2	93.2	111.4	83.7
1987	78.1	91.2	85.4	108.0	79.1
1988	83.0	92.9	89.2	104.5	85.4
1989	106.0	97.1	109.0	102.1	106.8
1990	97.1	100.1	96.9	100.2	96.8
1991	96.9	102.8	94.1	97.7	96.4
1992	92.5	106.3	86.8	93.6	92.9
1993	90.4	111.0	81.3	91.2	89.2
1994	96.2	113.0	85.0	88.8	95.8
% 94/93	6.4	1.8	4.5	-2.6	7.3

(1) AWU : Annual Work Unit

Table A.9 **Danmark**

Major components of the calculation of Indicator 1 (indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	37.5	29.5	127.1	186.8	68.1
1974	38.5	33.3	115.3	173.8	66.4
1975	34.5	37.5	91.9	165.9	55.4
1976	37.7	40.9	92.1	160.6	57.4
1977	46.3	44.7	103.3	154.3	67.0
1978	53.2	49.2	108.1	148.4	72.9
1979	47.7	52.9	90.1	142.4	63.3
1980	53.2	57.2	92.9	135.7	68.5
1981	64.1	63.0	101.6	129.6	78.4
1982	82.7	69.7	118.6	122.0	97.3
1983	74.4	75.0	99.2	120.7	82.2
1984	101.8	79.2	128.4	117.5	109.3
1985	94.5	82.7	114.3	113.2	101.0
1986	100.4	86.4	116.1	109.2	106.3
1987	80.2	90.5	88.6	104.9	84.5
1988	82.3	93.5	87.9	99.0	88.8
1989	100.9	97.5	103.4	101.4	102.0
1990	103.1	100.0	103.1	101.1	102.0
1991	96.0	102.5	93.6	97.6	95.9
1992	86.2	104.5	82.4	95.5	86.3
1993	86.0	106.3	80.8	94.7	85.4
1994	95.4	108.0	88.3	90.3	97.8
% 94/93	11.0	1.6	9.3	-4.6	14.6

(1) AWU : Annual Work Unit

Table A.10 **Deutschland**

Major components of the calculation of Indicator 1 (indices, 1989-1991=100 with the exception of (2))

	Nominal net value added at factor cost		Implicit price index of gross domestic product at market prices		Real net value added at factor cost		Total labour input in AWU (3)		Real net value added at factor cost per AWU	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1973	94.3		54.7		171.9		174.9		98.5	
1974	82.6		58.6		140.6		167.6		84.1	
1975	96.8		61.9		155.9		163.4		95.7	
1976	101.6		64.1		157.9		159.4		99.3	
1977	95.9		66.5		143.7		152.7		94.3	
1978	93.8		69.4		134.8		146.4		92.3	
1979	82.9		72.0		114.8		139.5		82.5	
1980	75.9		75.6		100.1		136.4		73.6	
1981	78.7		78.7		99.6		134.6		74.2	
1982	97.8		82.2		118.5		131.4		90.5	
1983	79.4		84.9		93.2		125.3		74.6	
1984	91.4		86.7		105.1		123.3		85.5	
1985	83.7		88.5		94.3		121.6		77.8	
1986	96.5		91.3		105.4		119.8		88.2	
1987	77.1		93.0		82.6		112.7		73.5	
1988	95.3		94.4		100.6		110.9		91.0	
1989	110.9		96.7		114.4		104.2		110.0	
1990	97.8	104.2	99.7	98.1	97.8	106.1	100.7	108.9	97.4	97.2
1991	91.3	95.8	103.6	101.9	87.9	93.9	95.1	91.1	92.6	102.8
1992	95.8	100.6	108.2	107.3	87.6	93.6	91.3	76.5	97.0	122.1
1993	:	83.7	111.7	111.5	:	75.0	86.1	70.5	:	106.1
1994	:	83.6	114.4	114.6	:	72.9	:	65.6	:	110.9
% 94/93	:	-0.1	2.4	2.8	:	-2.8	:	-7.0	:	4.5

(1) Germany in its boundaries prior to 3 october 1990.

(2) Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

(3) AWU : Annual Work Unit

Table A.11 **Ellada**

Major components of the calculation of Indicator 1 (indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	6.0	6.7	89.1	151.7	58.5
1974	6.9	8.1	84.7	148.5	56.8
1975	7.7	9.1	84.5	145.2	57.9
1976	9.4	10.5	89.6	142.1	62.8
1977	10.0	11.9	84.2	139.0	60.3
1978	12.5	13.4	93.2	135.8	68.3
1979	13.7	15.9	86.3	133.0	64.6
1980	18.0	18.7	96.1	130.0	73.6
1981	22.3	22.4	99.5	127.1	77.9
1982	28.3	28.1	101.0	125.6	80.0
1983	30.4	33.5	91.1	124.7	72.7
1984	39.8	40.2	99.1	124.8	79.0
1985	48.7	47.3	103.1	126.6	81.1
1986	54.7	55.6	98.4	122.1	80.2
1987	59.4	63.6	93.6	115.4	80.7
1988	69.9	73.5	95.3	115.7	82.0
1989	86.5	82.7	104.8	104.7	99.6
1990	88.0	99.9	88.2	102.3	85.8
1991	125.5	117.4	107.0	93.0	114.5
1992	122.3	134.9	90.8	97.6	92.5
1993	133.7	153.3	87.3	95.4	91.1
1994	159.1	169.7	93.9	92.4	101.1
% 94/93	19.0	10.7	7.5	-3.1	11.0

(1) AWU : Annual Work Unit

Table A.12 **Espana**

Major components of the calculation of Indicator 1 (indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	20.0	13.0	153.4	240.2	63.7
1974	19.3	15 1	127.2	232.3	54.6
1975	23.5	17.7	132.8	215.8	61.4
1976	27.0	20.6	131.0	198.9	65.7
1977	35.3	25.4	138.7	185.4	74.6
1978	41.7	30.6	136.1	179.7	75.5
1979	41.6	35.8	116.1	168.0	68.9
1980	47.1	40.6	115.7	154.7	74.6
1981	42.7	45.7	93.2	140.8	66.0
1982	54.1	52.1	103.7	135.6	76.3
1983	59.6	58.2	102.2	133.9	76.1
1984	69.0	65.0	106.0	127.0	83.2
1985	73.4	70.0	104.7	123.1	84.8
1986	73.6	77.7	94.6	118.5	79.6
1987	80.3	82.3	97.4	115.3	84.3
1988	94.7	86.9	108.8	112.7	96.2
1989	95.2	93.1	102.1	107.7	94.6
1990	102.3	100.0	102.2	101.3	100.6
1991	102.5	107.0	95.7	91.0	104.9
1992	91.6	113.9	80.3	86.6	92.5
1993	110.3	118.9	92.6	79.1	116.8
1994	125.7	123.1	102.0	76.9	132.4
% 94/93	14.0	3.5	10.1	-2.8	13.3

(1) AWU : Annual Work Unit

Table A.13 **France**

Major components of the calculation of Indicator 1 (indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	40.3	26.0	154.9	166.7	92.9
1974	40.3	29.2	137.9	161.4	85.5
1975	40.6	33.0	123.2	155.9	79.0
1976	43.9	36.6	120.0	152.6	78.6
1977	45.9	39.8	115.0	149.6	76.9
1978	51.6	43.8	117.5	147.2	79.8
1979	57.2	48.3	118.3	144.8	81.7
1980	56.3	53.9	104.3	141.1	73.9
1981	63.2	60.1	105.1	137.3	76.6
1982	81.5	67.3	121.0	133.6	90.6
1983	80.6	73.7	109.2	129.8	84.2
1984	83.3	79.1	105.3	125.8	83.7
1985	85.6	83.7	102.2	121.5	84.1
1986	87.6	88.2	99.2	117.2	84.7
1987	87.8	90.9	96.6	113.0	85.5
1988	85.7	93.7	91.5	108.8	84.1
1989	99.7	96.9	102.7	104.3	98.4
1990	103.4	100.0	103.4	100.1	103.3
1991	96.9	103.1	93.9	95.6	98.3
1992	96.3	105.5	91.2	91.3	99.9
1993	92.4	107.9	85.6	86.2	99.3
1994	101.9	109.6	92.9	83.2	111.6
% 94/93	10.3	1.6	8.5	-3.4	12.4

(1) AWU : Annual Work Unit

Table A.14 **Ireland**

Major components of the calculation of Indicator 1
(indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	21.6	20.4	105.6	135.2	78.1
1974	20.1	21.7	92.5	129.4	71.5
1975	28.8	26.1	110.5	126.0	87.7
1976	32.5	31.5	102.9	124.9	82.4
1977	44.4	35.7	124.2	123.8	100.3
1978	49.7	39.5	126.0	122.7	102.7
1979	45.9	44.9	102.2	121.6	84.1
1980	41.8	51.5	81.2	120.5	67.4
1981	48.3	60.5	79.9	116.0	68.9
1982	59.7	69.6	85.7	111.6	76.8
1983	68.4	77.1	88.7	107.2	82.8
1984	80.8	82.0	98.5	107.1	91.9
1985	73.9	86.3	85.6	107.1	80.0
1986	69.9	91.3	76.6	103.0	74.4
1987	83.9	93.5	89.7	98.8	90.9
1988	98.8	96.4	102.5	97.3	105.4
1989	103.6	100.8	102.9	101.5	101.4
1990	102.5	99.1	103.4	100.0	103.5
1991	93.9	100.2	93.7	98.5	95.2
1992	110.3	101.5	108.7	95.9	113.4
1993	113.2	105.1	107.7	94.0	114.6
1994	119.8	108.2	110.7	89.3	124.0
% 94/93	5.8	2.9	2.8	-5.0	8.2

(1) AWU : Annual Work Unit

Table A.15 **Italia**

Major components of the calculation of Indicator 1
(indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	18.4	11.8	155.5	157.2	98.9
1974	20.1	14.2	141.5	153.9	91.9
1975	23.1	16.5	139.8	148.0	94.4
1976	25.6	19.5	130.7	147.9	88.4
1977	30.8	23.2	132.9	142.7	93.1
1978	35.5	26.4	134.3	142.7	94.1
1979	43.1	30.5	141.0	140.4	100.4
1980	57.0	36.7	155.1	135.6	114.4
1981	62.1	43.7	141.9	126.9	111.8
1982	68.9	51.2	134.4	119.6	112.4
1983	84.7	59.0	143.6	122.0	117.7
1984	83.7	65.8	127.2	119.9	106.1
1985	87.4	71.6	122.0	115.0	106.1
1986	90.0	77.2	116.5	114.1	102.1
1987	94.7	81.9	115.7	111.8	103.5
1988	91.1	87.3	104.3	106.7	97.7
1989	96.4	92.7	103.9	101.2	102.7
1990	94.2	99.8	94.4	99.3	95.0
1991	109.4	107.5	101.8	99.5	102.3
1992	106.8	112.3	95.0	94.6	100.5
1993	101.6	117.3	86.6	88.1	98.4
1994	98.6	121.3	81.3	87.2	93.3
% 94/93	-2.9	3.4	-6.1	-1.1	-5.1

(1) AWU : Annual Work Unit

Table A.16

Luxembourg

Major components of the calculation of Indicator 1 (indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	51.7	39.5	130.3	211.0	61.9
1974	48.3	46.3	104.2	203.3	51.4
1975	49.7	45.9	108.0	191.8	56.5
1976	46.3	51.5	89.8	180.4	49.9
1977	57.3	52.1	109.7	176.7	62.3
1978	57.2	54.7	104.1	167.7	62.3
1979	60.7	58.2	103.9	160.9	64.7
1980	57.6	62.8	91.4	152.5	60.1
1981	65.1	67.3	96.4	143.7	67.3
1982	96.5	74.6	129.0	137.8	93.8
1983	85.6	79.7	107.1	131.2	81.8
1984	87.9	83.2	105.3	124.6	84.8
1985	91.3	85.7	106.2	121.2	87.9
1986	94.0	89.0	105.3	117.2	90.1
1987	91.2	88.1	103.2	111.5	92.8
1988	93.1	91.6	101.3	107.1	94.8
1989	110.2	97.1	113.2	104.6	108.5
1990	101.8	100.0	101.5	99.2	102.6
1991	88.0	102.9	85.3	96.2	88.9
1992	88.9	107.6	82.4	92.1	89.6
1993	89.0	109.9	80.8	89.9	90.1
1994	86.6	112.9	76.5	85.8	89.4
% 94/93	-2.7	2.8	-5.3	-4.5	-0.8

(1) AWU : Annual Work Unit

Table A.17

Nederland

Major components of the calculation of Indicator 1 (indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	52.3	50.0	104.6	120.6	86.7
1974	47.4	54.6	86.8	118.5	73.2
1975	55.6	60.1	92.4	117.1	78.9
1976	65.1	65.5	99.2	115.5	85.9
1977	64.2	69.9	91.7	112.2	81.8
1978	65.1	73.7	88.3	109.6	80.5
1979	61.6	76.6	80.4	108.2	74.3
1980	62.1	80.9	76.8	107.3	71.6
1981	78.8	85.3	92.3	105.2	87.8
1982	87.3	90.5	96.4	104.6	92.2
1983	85.9	92.2	93.1	104.7	88.9
1984	93.8	93.9	99.8	104.1	96.0
1985	90.1	95.6	94.2	103.5	91.0
1986	96.9	95.8	101.1	102.4	98.8
1987	81.1	95.3	85.0	101.4	83.8
1988	84.1	96.4	87.2	100.1	87.0
1989	100.4	97.6	102.8	100.2	102.7
1990	99.0	99.9	99.1	99.9	99.2
1991	100.6	102.6	98.0	99.9	98.1
1992	92.7	105.2	88.1	100.8	87.4
1993	81.0	106.9	75.7	99.7	76.0
1994	91.0	108.8	83.6	97.1	86.1
% 94/93	12.4	1.8	10.4	-2.6	13.3

(1) AWU : Annual Work Unit

Table A.18 **Portugal**

Major components of the calculation of Indicator 1 (indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	:	5.4	:	158.5	:
1974	:	6.2	:	155.0	:
1975	:	7.2	:	151.4	:
1976	:	7.6	:	153.9	:
1977	:	10.7	:	149.4	:
1978	:	13.1	:	141.4	:
1979	:	15.9	:	141.1	:
1980	26.0	19.2	135.2	140.1	96.5
1981	27.2	22.4	120.7	132.4	91.2
1982	35.5	27.1	130.3	128.0	101.8
1983	39.4	34.0	115.3	118.5	97.3
1984	50.6	43.1	116.6	118.9	98.1
1985	61.0	52.9	114.7	119.4	96.1
1986	70.4	62.3	112.4	110.2	101.9
1987	79.9	69.2	114.8	115.1	99.8
1988	71.8	76.7	93.1	110.1	84.6
1989	90.1	85.4	104.8	104.5	100.3
1990	103.2	100.2	102.4	98.0	104.5
1991	106.7	114.3	92.8	97.5	95.2
1992	97.8	129.7	75.0	91.1	82.3
1993	84.6	139.3	60.4	89.8	67.2
1994	107.7	146.4	73.2	90.3	81.0
% 94/93	27.3	5.1	21.2	0.5	20.5

(1) AWU : Annual Work Unit

Table A.19 **United Kingdom**

Major components of the calculation of Indicator 1 (indices, 1989-1991=100)

	Nominal net value added at factor cost	Implicit price index of gross domestic product at market prices	Real net value added at factor cost	Total labour input in AWU (1)	Real net value added at factor cost per AWU
1973	31.7	18.7	169.5	134.4	126.2
1974	31.9	21.5	148.1	129.2	114.7
1975	37.7	27.3	137.8	120.1	114.8
1976	47.8	31.5	151.7	120.9	125.5
1977	50.2	35.8	139.9	125.0	112.0
1978	52.8	40.0	132.0	125.0	105.6
1979	57.3	45.7	125.0	122.3	102.2
1980	62.3	54.7	113.8	119.1	95.6
1981	72.1	60.9	118.1	116.5	101.5
1982	83.1	65.5	126.7	115.2	110.0
1983	77.8	68.9	112.8	114.3	98.8
1984	95.9	71.9	133.1	112.4	118.4
1985	79.8	76.2	104.6	111.7	93.6
1986	85.0	78.7	107.8	109.7	98.3
1987	87.5	82.6	105.8	107.0	98.9
1988	82.5	87.6	94.0	105.1	89.5
1989	96.6	93.8	102.8	102.3	100.5
1990	102.6	99.8	102.6	100.3	102.4
1991	100.7	106.3	94.6	97.4	97.1
1992	109.5	111.2	98.3	96.1	102.3
1993	127.7	114.8	111.1	95.4	116.5
1994	132.5	117.2	112.9	93.4	120.8
% 94/93	3.7	2.1	1.6	-2.1	3.7

(1) AWU : Annual Work Unit

Table A.20

EUR 12

Major components of the calculation of Indicator 1 (indices, 1989-1991=100 with the exception of (2))

	Nominal net value added at factor cost		Implicit price index of gross domestic product at market prices	Real net value added at factor cost		Total labour input in AWU (3)		Real net value added at factor cost per AWU	
	(1)	(2)		(1)	(2)	(1)	(2)	(1)	(2)
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	54.5	:	:	114.5	:	136.7	:	83.8	:
1981	59.7	:	:	110.2	:	130.1	:	84.7	:
1982	71.9	:	:	117.5	:	125.6	:	93.5	:
1983	74.0	:	:	111.5	:	123.6	:	90.3	:
1984	80.7	:	:	112.1	:	121.1	:	92.6	:
1985	80.9	:	:	105.9	:	118.5	:	89.4	:
1986	84.8	:	:	103.8	:	115.0	:	90.2	:
1987	84.1	:	:	98.9	:	112.1	:	88.2	:
1988	87.7	:	:	98.1	:	108.7	:	90.2	:
1989	98.5	:	:	104.5	:	103.6	:	100.9	:
1990	99.0	98.5	:	99.0	101.5	100.1	102.8	98.9	98.7
1991	102.5	101.5	:	96.5	98.5	96.3	97.2	100.2	101.3
1992	100.4	99.6	:	90.3	92.2	92.9	92.2	97.1	100.0
1993	:	99.1	:	:	87.8	:	87.4	:	100.3
1994	:	106.2		:	91.0	:	85.1	:	106.8
% 94/93	:	7.2	:	:	3.6	:	-2.6	:	6.4

(1) With Germany in its boundaries prior to 3 october 1990.

(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

(3) AWU : Annual Work Unit

Table A.21

Indicator 1

Indices of real net value added at factor cost of total labour input per annual work unit (AWU) from 1973 to 1994, (Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	89.2	68.1	98.5	:	58.5	63.7	92.9	78.1	98.9	61.9	86.7	:	126.2	:	:
1974	71.3	66.4	84.1	:	56.8	54.6	85.5	71.5	91.9	51.4	73.2	:	114.7	:	:
1975	74.6	55.4	95.7	:	57.9	61.4	79.0	87.7	94.4	56.5	78.9	:	114.8	:	:
1976	88.0	57.4	99.3	:	62.8	65.7	78.6	82.4	88.4	49.9	85.9	:	125.5	:	:
1977	73.2	67.0	94.3	:	60.3	74.6	76.9	100.3	93.1	62.3	81.8	:	112.0	:	:
1978	78.9	72.9	92.3	:	68.3	75.5	79.8	102.7	94.1	62.3	80.5	:	105.6	:	:
1979	71.4	63.3	82.5	:	64.6	68.9	81.7	84.1	100.4	64.7	74.3	:	102.2	:	:
1980	75.6	68.5	73.6	:	73.6	74.6	73.9	67.4	114.4	60.1	71.6	96.5	95.6	83.8	:
1981	82.9	78.4	74.2	:	77.9	66.0	76.6	68.9	111.8	67.3	87.8	91.2	101.5	84.7	:
1982	87.3	97.3	90.5	:	80.0	76.3	90.6	76.8	112.4	93.8	92.2	101.8	110.0	93.5	:
1983	94.3	82.2	74.6	:	72.7	76.1	84.2	82.8	117.7	81.8	88.9	97.3	98.8	90.3	:
1984	90.8	109.3	85.5	:	79.0	83.2	83.7	91.9	106.1	84.8	96.0	98.1	118.4	92.6	:
1985	86.5	101.0	77.8	:	81.1	84.8	84.1	80.0	106.1	87.9	91.0	96.1	93.6	89.4	:
1986	83.7	106.3	88.2	:	80.2	79.6	84.7	74.4	102.1	90.1	98.8	101.9	98.3	90.2	:
1987	79.1	84.5	73.5	:	80.7	84.3	85.5	90.9	103.5	92.8	83.8	99.8	98.9	88.2	:
1988	85.4	88.8	91.0	:	82.0	96.2	84.1	105.4	97.7	94.8	87.0	84.6	89.5	90.2	:
1989	106.8	102.0	110.0	:	99.6	94.6	98.4	101.4	102.7	108.5	102.7	100.3	100.5	100.9	:
1990	96.8	102.0	97.4	97.2	85.8	100.6	103.3	103.5	95.0	102.6	99.2	104.5	102.4	98.9	98.7
1991	96.4	95.9	92.6	102.8	114.5	104.9	98.3	95.2	102.3	88.9	98.1	95.2	97.1	100.2	101.3
1992	92.9	86.3	97.0	122.1	92.5	92.5	99.9	113.4	100.5	89.6	87.4	82.3	102.5	97.1	100.0
1993	89.2	85.4	:	106.1	91.1	116.8	99.3	114.6	98.4	90.1	76.0	67.2	116.5	:	100.3
1994	95.8	97.8	:	110.9	101.1	132.4	111.6	124.0	93.3	89.4	86.1	81.0	120.8	:	106.8
% 94/93	7.3	14.6	:	4.5	11.0	13.3	12.4	8.2	-5.1	-0.8	13.3	20.5	3.7	:	6.4

(1) With Germany in its boundaries prior to 3 october 1990.

(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.22

Indicator 2

Indices of real net income from agricultural activity of total labour input per annual work unit (AWU) from 1973 to 1994, (Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	96.8	108.3	111.5	:	61.6	70.6	98.3	84.3	109.0	67.4	97.6	:	150.2	:	:
1974	76.7	100.4	92.0	:	59.2	58.9	89.3	74.1	100.5	54.7	79.8	:	133.1	:	:
1975	80.6	73.9	107.9	:	60.0	66.3	81.3	93.1	102.4	59.4	86.9	:	135.6	:	:
1976	96.6	73.0	112.5	:	65.2	70.3	80.1	86.7	94.6	50.1	95.1	:	149.5	:	:
1977	77.5	85.5	105.5	:	61.9	80.7	77.9	106.2	99.2	64.1	88.8	:	132.7	:	:
1978	82.2	88.6	101.9	:	70.1	82.0	80.7	107.0	99.4	64.5	85.1	:	123.0	:	:
1979	72.4	54.0	86.8	:	64.8	73.2	82.6	78.4	105.3	67.5	74.3	:	112.1	:	:
1980	75.5	47.6	73.1	:	73.8	79.2	73.1	57.2	120.0	61.5	68.1	109.3	99.5	85.8	:
1981	83.8	58.3	71.7	:	79.1	66.6	76.0	59.1	115.1	68.9	86.3	99.1	108.4	85.5	:
1982	89.2	96.3	92.4	:	81.4	79.0	92.2	66.8	114.6	100.6	92.7	108.2	118.8	95.7	:
1983	97.1	70.1	70.1	:	72.6	78.3	83.1	76.5	120.8	85.4	90.9	96.7	105.8	91.3	:
1984	92.5	130.0	83.7	:	78.1	86.8	81.9	89.1	107.6	87.8	99.9	97.9	128.7	93.8	:
1985	86.1	116.0	73.2	:	79.2	88.1	82.2	77.1	106.6	90.8	93.3	99.3	92.9	89.3	:
1986	83.9	126.6	87.8	:	79.1	81.6	82.8	71.5	102.1	92.7	102.3	107.0	100.3	90.5	:
1987	78.4	72.4	67.4	:	79.8	87.1	84.4	91.6	104.0	95.2	83.2	103.1	103.2	88.3	:
1988	84.3	74.5	90.2	:	81.7	101.7	81.9	109.7	96.6	97.0	87.1	85.3	90.9	90.2	:
1989	110.3	107.0	114.1	:	100.6	94.1	98.2	103.4	101.9	112.6	105.0	102.9	99.7	101.4	:
1990	96.5	110.0	96.8	101.3	85.4	101.8	103.9	102.6	94.1	102.4	98.7	104.1	101.0	98.7	99.2
1991	93.2	83.0	89.1	98.7	114.0	104.1	97.9	94.0	103.9	85.0	96.3	93.0	99.3	99.9	100.8
1992	87.2	63.1	94.4	118.7	91.2	88.3	99.2	115.2	101.1	83.9	84.1	76.5	110.3	96.2	98.9
1993	82.0	58.2	:	96.8	89.5	118.2	98.4	119.3	99.9	83.8	69.8	60.9	134.5	:	99.9
1994	89.2	78.6	:	100.7	100.7	135.1	112.8	131.4	96.9	83.6	82.4	80.5	141.4	:	108.2
% 94/93	8.8	34.9	:	4.1	12.5	14 3	14.6	10.1	-3.0	-0.2	18.0	32.3	5.1	:	8.3

(1) Germany in its boundaries prior to 3 october 1990.
(2) Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.23

Indicator 3

Indices of real net income from agricultural activity of family labour input per annual work unit (AWU) from 1973 to 1994, (Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	94.9	121.2	119.1	:	66.2	71.8	107.1	86.2	150.9	63.6	97.5	:	211.2	:	:
1974	74.5	108.5	95.4	:	63.1	53.2	94.0	74.1	128.5	51.3	77.2	:	174.0	:	:
1975	79.1	70.7	115.4	:	62.9	63.7	83.6	95.6	124.8	55.8	84.9	:	179.6	:	:
1976	95.4	68.9	120.7	:	68.3	65.3	81.9	89.1	107.6	46.9	94.4	:	202.6	:	:
1977	75.9	86.2	110.8	:	64.2	76.9	79.2	110.9	110.1	60.9	87.0	:	168.9	:	:
1978	80.6	89.0	105.7	:	72.0	77.4	82.3	112.0	108.8	61.4	82.3	:	149.0	:	:
1979	70.6	37.2	87.8	:	66.0	67.0	83.9	79.7	117.4	64.7	69.7	:	127.5	:	:
1980	74.4	25.7	70.3	:	74.4	75.5	71.8	55.8	137.1	59.2	63.2	105.2	107.5	84.4	:
1981	83.0	40.7	68.2	:	79.9	58.2	75.2	59.0	129.2	67.0	85.4	94.8	122.9	84.0	:
1982	89.0	92.9	93.5	:	82.8	74.8	94.5	68.5	129.8	99.3	93.6	107.3	140.1	97.8	:
1983	97.3	54.2	65.6	:	74.5	74.0	82.5	79.5	136.8	84.5	91.5	96.7	114.3	91.1	:
1984	91.9	140.4	82.6	:	80.9	87.3	80.5	94.2	116.1	86.9	101.8	99.7	153.4	95.0	:
1985	85.6	118.9	68.4	:	84.0	86.7	80.5	80.2	111.6	89.4	94.6	101.9	88.5	88.3	:
1986	83.6	135.3	86.9	:	83.4	79.9	81.0	73.2	106.3	91.7	105.8	111.0	102.0	90.3	:
1987	77.3	52.8	61.6	:	84.9	87.0	82.0	95.2	109.2	94.3	81.6	106.2	108.0	87.0	:
1988	83.2	55.2	89.3	:	87.0	105.7	78.3	113.9	94.5	96.5	85.4	82.6	87.0	88.9	:
1989	111.4	108.2	119.0	:	100.9	94.4	98.4	105.5	101.9	112.9	106.5	103.6	101.7	102.6	:
1990	96.7	116.3	97.2	:	84.6	103.0	104.9	102.6	89.0	102.7	97.8	106.0	101.5	98.5	:
1991	91.9	75.5	83.8	:	114.5	102.6	96.7	91.9	109.1	84.4	95.7	90.4	96.8	98.9	:
1992	85.0	44.2	90.4	:	90.2	84.8	97.5	114.1	98.3	83.2	79.7	70.6	115.5	93.1	:
1993	79.5	37.9	:	:	88.3	123.2	95.5	118.8	96.3	83.0	59.4	49.8	157.3	:	:
1994	87.3	68.7	:	:	99.9	145.4	114.2	131.8	94.5	81.6	76.0	73.0	166.6	:	:
% 94/93	9.8	81.3	:	:	13.2	18.0	19.6	11.0	-1.9	-1.8	28.0	46.6	5.9	:	:

(1) Germany in its boundaries prior to 3 october 1990.
(2) Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.24

Volume indices of final output in agriculture from 1973 to 1994
(Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	81.6	69.3	85.4	:	78.7	75.1	74.8	68.7	81.7	94.9	60.3	:	91.7	:	:
1974	83.7	75.4	85.6	:	80.0	73.2	72.7	69.2	82.8	97.8	63.7	:	88.7	:	:
1975	77.6	69.9	85.7	:	85.8	73.2	70.1	70.8	85.3	96.2	62.9	:	82.9	:	:
1976	76.2	70.9	86.2	:	84.6	75.6	71.0	70.4	83.3	92.7	65.3	:	82.5	:	:
1977	77.8	76.8	90.1	:	81.3	75.2	73.8	77.4	85.2	94.3	68.1	:	86.8	:	:
1978	80.9	79.1	93.6	:	87.9	79.2	79.1	81.4	87.7	94.2	72.7	:	90.9	:	:
1979	81.8	81.1	93.9	:	84.9	81.2	86.7	81.4	93.6	93.6	76.0	:	91.7	:	:
1980	82.0	81.8	95.3	:	93.5	86.9	85.3	80.3	97.7	92.2	78.1	84.7	93.6	89.4	:
1981	82.4	83.7	94.0	:	94.2	81.3	84.1	80.0	95.7	95.7	81.6	80.2	91.4	88.0	:
1982	85.4	87.7	102.3	:	96.0	85.2	92.9	85.3	94.4	104.8	84.4	85.0	97.5	92.7	:
1983	84.1	86.0	99.4	:	92.1	88.2	91.1	88.4	101.4	100.7	86.8	83.2	96.3	93.4	:
1984	88.1	93.7	102.4	:	94.7	92.2	93.5	95.7	96.5	102.5	89.3	84.5	103.2	95.4	:
1985	89.4	94.1	98.3	:	98.8	96.1	94.1	94.4	96.8	100.7	89.6	88.7	99.7	95.6	:
1986	94.0	94.9	102.7	:	97.8	90.7	94.9	93.1	99.0	102.7	94.3	89.4	100.1	96.6	:
1987	92.4	91.7	97.0	:	96.5	98.1	97.2	94.0	102.4	99.7	91.9	94.0	99.3	97.6	:
1988	95.8	95.6	100.4	:	100.8	103.0	96.1	95.4	99.3	99.3	93.8	83.5	98.9	98.2	:
1989	98.7	98.4	100.4	:	105.1	97.9	99.5	92.0	100.1	102.6	97.1	94.0	99.4	99.3	:
1990	97.6	102.0	99.6	99.6	90.9	101.9	101.6	103.9	96.9	101.2	100.4	102.5	100.3	99.8	99.4
1991	103.7	99.5	99.9	100.4	104.0	100.2	98.9	104.1	103.0	96.2	102.5	103.4	100.2	100.9	100.6
1992	108.9	97.0	102.0	105.2	101.7	100.1	104.8	109.3	104.8	106.1	104.2	98.4	102.1	103.2	103.3
1993	111.8	103.6	:	100.1	100.4	99.0	99.8	106.0	101.8	101.2	106.2	92.6	99.1	:	100.7
1994	108.4	102.4	:	97.4	104.1	97.2	100.2	104.7	100.1	100.3	105.6	93.2	99.8	:	99.8
% 94/93	-3.1	-1.1	:	-2.7	3.7	-1.8	0.4	-1.2	-1.7	-0.9	-0.6	0.7	0.7	:	-0.8

(1) With Germany in its boundaries prior to 3 october 1990.
(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.25

Nominal price indices of final output in agriculture from 1973 to 1994
(Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	57.8	49.9	86.2	:	7.5	23.1	41.6	27.7	19.4	53.4	75.0	:	30.2	:	:
1974	56.0	49.5	84.5	:	8.7	24.9	45.8	28.4	23.2	51.9	71.1	:	35.1	:	:
1975	64.8	55.2	92.3	:	9.3	28.6	48.8	37.5	26.5	55.8	79.7	:	43.1	:	:
1976	74.7	62.3	102.1	:	11.3	32.3	54.2	45.9	32.2	60.1	89.0	:	54.8	:	:
1977	71.4	65.1	100.9	:	12.5	40.9	57.0	56.2	37.6	61.4	88.5	:	58.8	:	:
1978	71.0	70.3	97.4	:	14.2	45.6	60.2	62.1	42.7	62.1	85.7	:	59.7	:	:
1979	71.6	71.7	99.7	:	17.0	47.6	62.2	66.0	47.2	64.6	85.2	:	66.7	:	:
1980	76.0	78.8	100.1	:	20.5	50.9	67.7	65.3	53.0	66.2	89.4	27.4	70.8	66.9	:
1981	82.4	88.9	108.0	:	24.8	57.5	76.4	76.1	61.4	72.4	98.6	33.5	79.4	75.3	:
1982	89.2	99.4	109.0	:	30.1	66.2	83.3	82.2	70.2	84.1	101.7	39.4	84.3	81.8	:
1983	99.6	102.9	108.3	:	35.5	72.6	90.0	88.7	77.0	87.4	102.0	48.6	87.2	86.3	:
1984	100.1	107.9	107.7	:	43.9	81.1	93.3	91.0	83.5	88.8	104.9	62.0	88.8	90.6	:
1985	99.6	104.3	105.4	:	51.7	83.2	95.0	88.9	88.1	92.3	104.2	69.5	86.8	91.6	:
1986	95.3	102.6	99.2	:	58.8	91.4	94.6	89.5	89.5	92.2	97.9	78.7	88.7	92.0	:
1987	93.3	98.1	95.2	:	64.7	89.0	92.7	93.6	89.4	92.1	97.2	84.8	91.2	91.0	:
1988	93.3	97.9	96.7	:	72.5	93.4	95.7	101.5	91.4	95.4	97.5	94.1	92.1	93.6	:
1989	103.5	103.9	103.8	:	81.8	99.3	101.0	112.5	95.7	102.4	103.3	97.9	99.1	99.7	:
1990	98.6	98.6	98.4	100.3	99.7	100.1	100.4	95.1	100.1	103.0	98.1	100.8	100.8	99.6	99.5
1991	97.9	97.5	97.8	99.7	118.5	100.6	98.6	92.4	104.2	94.6	98.6	101.3	100.1	100.7	100.5
1992	92.4	96.9	94.7	93.5	121.3	93.5	91.1	94.2	101.3	93.0	94.8	94.5	100.5	96.6	95.9
1993	88.4	86.3	:	89.7	130.0	97.5	86.2	100.0	102.6	93.6	88.5	95.6	104.5	:	94.8
1994	93.0	87.7	:	91.0	147.2	107.7	87.6	99.9	104.8	91.9	92.1	101.9	105.8	:	98.2
% 94/93	5.2	1.6	:	1.5	13.2	10.4	1.6	0.0	2.1	-1.8	4.0	6.6	1.3	:	3.5

(1) With Germany in its boundaries prior to 3 october 1990.
(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.26

Real price indices of final output in agriculture from 1973 to 1994
(Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	146.9	169.1	157.2	:	111.5	176.4	160.1	136.2	163.8	134.5	149.9	:	161.3	:	:
1974	126.5	148.5	144.0	:	106.7	164.2	157.0	131.7	163.1	111.9	130.3	:	163.1	:	:
1975	130.6	147.2	148.9	:	101.5	161.8	148.1	144.4	160.6	121.2	132.6	:	157.5	:	:
1976	139.9	152.4	158.9	:	107.2	156.7	148.2	146.2	164.6	116.4	135.9	:	173.8	:	:
1977	124.4	145.4	151.4	:	105.4	160.7	142.9	158.2	162.2	117.6	126.7	:	163.9	:	:
1978	118.4	142.8	140.2	:	105.9	148.7	137.3	157.9	161.3	113.0	116.3	:	149.1	:	:
1979	114.4	135.5	138.3	:	106.7	132.5	128.7	147.8	154.2	110.7	111.3	:	145.4	:	:
1980	116.9	137.6	132.1	:	109.6	124.9	125.3	127.4	144.3	105.1	110.5	141.8	129.1	129.2	:
1981	121.1	141.0	136.9	:	110.6	125.4	127.1	126.4	140.3	107.1	115.6	148.0	130.2	130.3	:
1982	122.3	142.6	132.3	:	107.3	126.8	123.7	118.6	137.0	112.3	112.4	144.5	128.4	127.6	:
1983	129.3	137.1	127.4	:	106.1	124.4	122.0	115.6	130.4	109.3	110.6	141.7	126.4	124.6	:
1984	123.6	136.1	124.0	:	109.1	124.5	117.9	111.6	126.7	106.4	111.7	142.5	123.2	122.0	:
1985	115.9	126.1	119.0	:	109.4	118.6	113.3	103.5	122.9	107.4	109.0	130.4	113.7	116.7	:
1986	106.8	118.6	108.5	:	105.7	117.3	107.2	98.5	115.7	103.3	102.2	125.4	112.5	110.8	:
1987	102.3	108.4	102.3	:	101.8	107.9	101.9	100.7	109.1	104.2	102.0	121.6	110.3	105.4	:
1988	100.4	104.6	102.3	:	98.7	107.2	102.1	105.9	104.6	103.8	101.2	121.6	104.9	103.7	:
1989	106.6	106.5	107.1	:	99.1	106.4	104.1	112.2	103.0	105.2	105.8	113.6	105.4	105.1	:
1990	98.5	98.5	98.6	102.2	99.9	99.9	100.3	96.5	100.2	102.7	98.3	99.8	100.7	99.6	102.2
1991	95.2	95.1	94.3	97.8	101.0	93.8	95.6	92.7	96.9	91.6	96.2	87.9	93.9	95.3	97.8
1992	86.9	92.7	87.4	87.1	90.0	81.9	86.3	93.3	90.1	86.2	90.1	72.3	90.3	87.6	89.3
1993	79.6	81.2	:	80.4	84.9	81.8	79.8	95.6	87.4	85.0	82.8	68.1	90.8	:	84.8
1994	82.3	81.2	:	79.4	86.8	87.2	79.8	92.9	86.3	81.2	84.6	69.0	90.1	:	85.4
% 94/93	3.4	0.0	:	-1.3	2.3	6.6	0.0	-2.8	-1.3	-4.4	2.1	1.4	-0.8	:	0.6

(1) With Germany in its boundaries prior to 3 october 1990.
(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.27

Nominal value indices of final output in agriculture from 1973 to 1994
(Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	47.2	34.6	73.6	:	5.9	17.3	31.1	19.1	15.8	50.6	45.2	:	27.7	:	:
1974	46.9	37.4	72.3	:	6.9	18.2	33.3	19.8	19.2	50.7	45.3	:	31.1	:	:
1975	50.3	38.6	79.1	:	7.9	21.0	34.2	26.6	22.6	53.6	50.2	:	35.7	:	:
1976	56.9	44.2	88.0	:	9.5	24.4	38.5	32.5	26.8	55.6	58.1	:	45.2	:	:
1977	55.6	50.0	90.9	:	10.2	30.8	42.1	43.7	32.1	57.9	60.3	:	51.1	:	:
1978	57.4	55.6	91.2	:	12.5	36.1	47.6	50.7	37.4	58.4	62.3	:	54.3	:	:
1979	58.6	58.2	93.6	:	14.4	38.6	53.9	54.0	44.1	60.5	64.8	:	61.1	:	:
1980	62.3	64.4	95.3	:	19.2	44.2	57.7	52.7	51.8	61.0	69.9	23.2	66.2	59.9	:
1981	67.9	74.4	101.5	:	23.4	46.8	64.3	61.2	58.7	69.2	80.5	26.8	72.6	66.2	:
1982	76.2	87.2	111.5	:	28.9	56.4	77.4	70.4	66.3	88.0	85.8	33.5	82.2	75.8	:
1983	83.8	88.5	107.6	:	32.7	64.0	82.0	78.8	78.0	88.0	88.5	40.4	83.9	80.6	:
1984	88.2	101.2	110.2	:	41.6	74.8	87.3	87.5	80.5	90.9	93.6	52.3	91.6	86.5	:
1985	89.0	98.1	103.6	:	51.2	79.9	89.4	84.3	85.2	92.8	93.5	61.6	86.5	87.5	:
1986	89.6	97.4	101.9	:	57.5	82.8	89.7	83.8	88.5	94.6	92.3	70.4	88.8	88.9	:
1987	86.3	90.1	92.4	:	62.4	87.3	90.1	88.4	91.5	91.7	89.4	79.7	90.6	88.8	:
1988	89.4	93.6	97.1	:	73.1	96.2	92.0	97.4	90.7	94.6	91.5	78.5	91.1	91.9	:
1989	102.2	102.3	104.2	:	86.1	97.2	100.6	104.0	95.7	105.0	100.3	92.0	98.6	99.0	:
1990	96.3	100.6	98.1	99.9	90.6	102.0	102.0	99.3	97.0	104.1	98.5	103.3	101.1	99.4	98.9
1991	101.5	97.1	97.8	100.1	123.3	100.8	97.5	96.7	107.3	90.9	101.2	104.7	100.3	101.6	101.1
1992	100.7	94.0	96.5	98.4	123.5	93.6	95.5	103.5	106.1	98.5	98.9	93.0	102.6	99.7	99.1
1993	98.9	89.4	:	89.8	130.6	96.5	86.0	106.4	104.4	94.6	94.1	88.4	103.6	:	95.5
1994	100.9	89.8	:	88.6	153.3	104.6	87.8	105.1	104.8	92.2	97.3	94.9	105.7	:	98.0
% 94/93	2.0	0.5	:	-1.3	17.4	8.3	2.0	-1.2	0.4	-2.6	3.4	7.3	2.0	:	2.6

(1) With Germany in its boundaries prior to 3 october 1990.
(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.28

Real value indices of final output in agriculture from 1973 to 1994
(Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	119.9	117.2	134.2	:	87.8	132.5	119.7	93.6	133.7	127.7	90.4	:	148.0	:	:
1974	105.9	111.9	123.2	:	85.3	120.2	114.1	91.2	135.1	109.5	83.0	:	144.6	:	:
1975	101.3	102.9	127.6	:	87.1	118.4	103.8	102.2	137.0	116.6	83.4	:	130.6	:	:
1976	106.6	108.0	136.9	:	90.7	118.5	105.2	103.0	137.1	107.9	88.7	:	143.4	:	:
1977	96.8	111.7	136.5	:	85.7	120.9	105.6	122.4	138.2	110.9	86.3	:	142.3	:	:
1978	95.8	112.9	131.2	:	93.0	117.7	108.5	128.5	141.4	106.5	84.5	:	135.5	:	:
1979	93.5	109.9	129.8	:	90.6	107.7	111.5	120.2	144.3	103.7	84.6	:	133.4	:	:
1980	95.8	112.5	125.9	:	102.5	108.6	106.9	102.3	141.0	96.9	86.3	120.1	120.9	115.5	:
1981	99.8	118.0	128.7	:	104.2	102.0	107.0	101.2	134.3	102.5	94.3	118.7	119.0	114.6	:
1982	104.4	125.1	135.3	:	103.0	108.1	115.0	101.1	129.3	117.7	94.8	122.8	125.2	118.3	:
1983	108.8	118.0	126.5	:	97.7	109.7	111.2	102.2	132.2	110.1	96.0	117.9	121.6	116.3	:
1984	108.9	127.6	127.0	:	103.4	114.8	110.3	106.7	122.3	109.0	99.7	120.5	127.2	116.4	:
1985	103.6	118.6	116.9	:	108.1	114.0	106.6	97.8	118.9	108.1	97.7	115.7	113.3	111.5	:
1986	100.4	112.6	111.5	:	103.5	106.3	101.7	91.7	114.5	106.1	96.3	112.1	112.7	107.0	:
1987	94.5	99.4	99.2	:	98.2	105.8	99.1	94.6	111.7	103.9	93.7	114.3	109.5	102.9	:
1988	96.2	100.0	102.7	:	99.5	110.4	98.1	101.1	103.8	103.1	94.9	101.6	103.7	101.8	:
1989	105.1	104.9	107.6	:	104.2	104.2	103.6	103.2	103.1	107.9	102.7	106.8	104.8	104.4	:
1990	96.2	100.5	98.2	101.8	90.8	101.8	101.9	100.2	97.1	103.9	98.7	102.3	101.0	99.4	101.6
1991	98.7	94.6	94.2	98.2	105.0	94.0	94.5	96.6	99.8	88.2	98.6	90.9	94.1	96.2	98.4
1992	94.6	89.9	89.1	91.6	91.5	82.0	90.5	102.0	94.4	91.4	93.9	71.2	92.2	90.4	92.3
1993	89.0	84.1	:	80.5	85.2	81.0	79.7	101.3	89.0	86.0	88.0	63.0	90.1	:	85.4
1994	89.2	83.1	:	77.3	90.4	84.7	80.0	97.2	86.4	81.5	89.4	64.3	90.0	:	85.2
% 94/93	0.2	-1.1	:	-4.0	6.0	4.7	0.4	-4.0	-2.9	-5.3	1.6	2.1	-0.1	:	-0.2

(1) With Germany in its boundaries prior to 3 october 1990.
(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.29

Volume indices of intermediate consumption in agriculture from 1973 to 1994
(Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	78.3	82.1	86.6	:	62.7	53.1	76.1	65.3	68.3	83.5	65.5	:	99.3	:	:
1974	77.9	77.0	84.5	:	65.1	56.8	78.6	58.2	69.8	86.4	67.1	:	94.9	:	:
1975	78.2	80.0	86.3	:	71.3	58.5	75.5	55.6	70.2	84.3	67.9	:	95.2	:	:
1976	77.4	87.6	91.8	:	74.1	63.0	78.6	62.3	73.9	91.2	71.6	:	96.1	:	:
1977	78.7	89.7	95.6	:	78.7	66.4	80.2	68.8	78.6	85.9	75.2	:	97.0	:	:
1978	79.5	97.2	99.8	:	80.7	70.8	84.4	78.9	84.3	79.4	79.7	:	97.9	:	:
1979	81.2	104.0	104.1	:	82.4	76.5	88.0	90.5	89.7	77.9	83.2	:	99.0	:	:
1980	80.6	99.1	104.4	:	86.2	80.9	89.2	80.7	93.1	78.7	88.4	90.5	96.4	91.7	:
1981	79.8	97.1	101.4	:	88.9	85.2	88.9	84.7	90.8	78.5	86.5	94.0	93.5	91.0	:
1982	81.8	98.8	102.5	:	90.5	88.5	89.4	84.3	90.8	76.6	86.2	92.7	99.7	92.5	:
1983	81.0	101.4	104.2	:	93.6	89.0	90.0	88.5	92.4	84.0	96.1	88.5	102.4	94.5	:
1984	83.2	99.5	103.7	:	93.1	91.6	91.4	88.3	92.9	83.0	90.1	84.9	100.6	94.4	:
1985	85.4	100.4	103.0	:	96.2	91.5	91.4	89.3	93.7	86.0	96.0	85.7	100.4	95.1	:
1986	89.6	98.1	102.1	:	90.5	94.6	93.3	95.2	95.9	90.0	99.5	86.6	103.3	96.8	:
1987	92.4	101.1	102.1	:	95.1	95.6	95.9	91.3	99.9	93.9	113.7	92.2	103.3	99.6	:
1988	94.0	99.5	101.7	:	96.3	97.5	97.6	92.6	100.2	95.6	110.6	90.7	103.6	100.0	:
1989	97.6	99.0	101.4	:	99.6	98.0	99.8	100.4	100.6	97.7	99.6	98.9	102.1	100.0	:
1990	98.4	101.2	99.8	100.5	100.0	100.2	101.0	99.2	98.8	100.2	99.3	101.8	99.8	100.0	100.0
1991	104.0	99.8	98.8	99.5	100.4	101.8	99.2	100.4	100.5	102.1	101.2	99.2	98.2	100.0	100.0
1992	105.3	104.6	96.3	95.4	102.0	104.5	98.6	100.8	99.1	104.0	101.4	92.6	97.0	99.6	99.2
1993	107.0	105.0	:	91.2	106.3	94.5	98.1	105.1	97.7	101.1	102.2	92.0	97.0	:	97.2
1994	107.7	103.6	:	89.4	107.4	98.5	99.4	111.1	98.3	101.4	102.3	90.4	97.4	:	97.8
% 94/93	0.7	-1.3	:	-1.9	1.1	4.2	1.3	5.7	0.6	0.3	0.1	-1.8	0.5	:	0.6

(1) With Germany in its boundaries prior to 3 october 1990.
(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.30

Nominal price indices of intermediate consumption in agriculture from 1973 to 1994 (Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	55.2	42.9	74.9	:	7.1	26.7	29.9	22.0	19.1	50.9	69.9	:	26.7	:	:
1974	60.8	49.7	79.8	:	8.8	29.6	37.0	30.2	25.7	57.0	75.0	:	34.1	:	:
1975	63.9	53.5	82.2	:	10.0	30.4	39.7	36.9	29.4	63.6	76.4	:	38.4	:	:
1976	71.8	58.6	90.4	:	10.9	33.4	44.2	44.6	35.0	69.9	84.1	:	46.1	:	:
1977	73.2	62.2	93.1	:	11.9	37.3	48.3	53.8	39.7	71.1	85.8	:	53.4	:	:
1978	71.1	61.8	89.2	:	12.7	39.9	51.3	56.3	42.5	70.4	83.8	:	55.1	:	:
1979	74.8	66.1	95.1	:	16.2	43.5	56.0	60.8	47.1	72.9	89.9	:	61.9	:	:
1980	80.2	76.7	99.9	:	21.5	48.4	64.3	69.1	56.2	79.8	94.5	20.8	69.5	70.7	:
1981	87.2	89.5	109.4	:	26.2	58.8	72.9	79.6	68.7	88.9	103.9	26.1	75.5	79.6	:
1982	96.2	98.9	112.2	:	30.1	64.6	81.2	88.0	78.1	96.3	108.4	32.1	80.7	85.9	:
1983	105.4	104.8	114.2	:	37.2	75.4	90.0	94.5	87.0	106.2	104.3	44.2	86.9	92.4	:
1984	110.5	109.8	116.2	:	44.4	85.4	97.4	101.3	94.7	110.9	114.2	60.3	89.9	98.7	:
1985	109.1	107.2	112.9	:	52.7	91.0	99.5	103.7	97.2	107.3	108.2	70.3	90.6	99.4	:
1986	103.8	101.7	103.7	:	61.3	92.2	96.0	99.4	93.6	100.6	95.0	79.2	88.5	95.1	:
1987	97.5	97.7	98.3	:	67.5	93.9	94.7	94.8	92.7	94.0	85.6	81.8	89.0	92.8	:
1988	98.7	102.5	97.8	:	76.2	95.6	98.1	97.4	94.2	95.1	89.3	89.6	92.4	95.3	:
1989	101.5	106.1	100.1	:	82.8	98.4	101.3	98.5	97.6	98.7	101.6	94.1	96.3	99.3	:
1990	98.9	97.3	99.1	98.1	98.8	99.6	99.5	100.8	100.5	100.4	98.4	99.6	99.5	99.4	98.9
1991	99.6	96.6	100.8	101.9	118.4	102.1	99.2	100.7	101.9	100.9	99.8	106.3	104.2	101.3	101.2
1992	99.0	95.7	101.7	102.7	135.1	103.0	99.7	100.4	103.1	101.7	100.4	103.9	106.2	102.4	102.2
1993	98.1	99.9	:	102.9	145.4	115.2	98.1	100.6	110.1	98.4	98.9	105.1	112.5	:	105.1
1994	98.3	98.0	:	103.2	157.1	117.9	96.8	100.9	111.6	98.6	97.6	109.1	112.8	:	105.4
% 94/93	0.2	-1.8	:	0.3	8.0	2.3	-1.3	0.3	1.3	0.2	-1.4	3.8	0.3	:	0.3

(1) With Germany in its boundaries prior to 3 october 1990.
(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.31

Real price indices of intermediate consumption in agriculture from 1973 to 1994 (Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	140.4	145.3	136.8	:	105.9	204.5	115.1	107.7	161.3	128.8	139.7	:	142.8	:	:
1974	137.3	148.9	136.0	:	108.8	195.7	126.9	139.3	180.9	123.1	137.4	:	158.4	:	:
1975	128.8	142.5	132.7	:	110.1	171.6	120.5	141.6	177.6	138.6	126.9	:	140.3	:	:
1976	134.6	143.2	140.8	:	103.8	162.3	120.6	141.4	178.6	135.7	128.2	:	146.3	:	:
1977	127.7	138.8	139.8	:	100.2	146.7	121.1	150.6	170.7	136.6	122.7	:	148.9	:	:
1978	118.8	125.6	128.4	:	94.8	130.1	116.9	142.5	160.4	128.6	113.7	:	137.8	:	:
1979	119.4	124.9	132.0	:	101.4	121.2	115.7	135.4	153.8	125.2	117.4	:	135.2	:	:
1980	123.4	134.0	132.0	:	114.6	118.9	119.1	134.2	152.6	126.9	116.8	107.5	126.9	127.2	:
1981	128.2	141.9	138.7	:	116.8	128.4	121.3	131.6	156.8	131.9	121.7	115.4	123.8	131.1	:
1982	132.1	141.8	136.2	:	107.4	123.8	120.7	126.4	152.1	129.1	119.7	117.8	123.1	128.9	:
1983	137.0	139.7	134.3	:	111.2	129.3	122.0	122.5	147.2	133.2	113.0	129.0	126.0	129.0	:
1984	136.5	138.4	133.9	:	110.4	131.2	123.0	123.5	143.6	133.2	121.5	138.8	124.9	129.8	:
1985	127.1	129.6	127.5	:	111.3	129.9	118.8	120.2	135.5	125.2	113.0	131.9	118.8	124.1	:
1986	116.4	117.6	113.5	:	110.3	118.4	108.8	108.9	120.9	113.0	99.1	126.1	112.4	112.9	:
1987	106.9	107.9	105.6	:	106.2	114.0	104.2	101.5	112.9	106.8	89.8	117.3	107.7	106.2	:
1988	106.2	109.5	103.5	:	103.8	109.8	104.6	101.1	107.6	103.8	92.6	115.9	105.4	104.8	:
1989	104.5	108.7	103.4	:	100.2	105.5	104.4	97.8	105.0	101.6	104.3	109.2	102.5	104.2	:
1990	98.8	97.2	99.3	100.0	99.0	99.5	99.4	101.7	100.5	100.4	98.5	98.6	99.5	99.4	101.3
1991	96.9	94.2	97.2	100.0	100.9	95.3	96.2	100.5	94.5	98.0	97.2	92.3	97.9	96.4	98.7
1992	93.1	91.6	93.9	95.7	100.2	90.3	94.5	98.9	91.6	94.5	95.4	79.5	95.5	93.4	95.4
1993	88.3	93.9	:	92.3	94.9	96.7	90.8	95.7	93.7	89.6	92.5	74.9	97.9	:	94.6
1994	87.0	90.7	:	90.0	92.6	95.6	88.2	93.3	91.8	87.3	89.6	73.9	96.1	:	92.4
% 94/93	-1.6	-3.4	:	-2.4	-2.4	-1.1	-2.9	-2.6	-2.0	-2.5	-3.1	-1.2	-1.8	:	-2.3

(1) With Germany in its boundaries prior to 3 october 1990.
(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.32

Nominal value indices of intermediate consumption in agriculture from 1973 to 1994
(Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	43.2	35.2	64.9	:	4.5	14.2	22.7	14.4	13.0	42.5	45.8	:	26.6	:	:
1974	47.3	38.3	67.4	:	5.7	16.8	29.1	17.6	18.0	49.2	50.3	:	32.4	:	:
1975	50.0	42.8	71.0	:	7.2	17.8	30.0	20.5	20.6	53.5	51.9	:	36.5	:	:
1976	55.6	51.3	83.0	:	8.1	21.0	34.7	27.8	25.9	63.7	60.2	:	44.3	:	:
1977	57.7	55.8	89.0	:	9.4	24.8	38.7	37.0	31.2	61.1	64.5	:	51.9	:	:
1978	56.5	60.0	89.0	:	10.3	28.3	43.3	44.4	35.8	55.9	66.8	:	54.0	:	:
1979	60.7	68.8	99.1	:	13.3	33.3	49.3	55.0	42.2	56.8	74.8	:	61.3	:	:
1980	64.7	76.1	104.3	:	18.5	39.1	57.3	55.8	52.3	62.7	83.6	18.8	67.0	64.8	:
1981	69.6	86.9	110.9	:	23.3	50.1	64.8	67.5	62.4	69.7	89.9	24.5	70.6	72.4	:
1982	78.7	97.7	115.0	:	27.3	57.2	72.6	74.2	70.9	73.8	93.4	29.8	80.5	79.5	:
1983	85.4	106.3	119.0	:	34.8	67.1	81.0	83.7	80.4	89.3	100.3	39.2	89.0	87.3	:
1984	91.9	109.3	120.5	:	41.3	78.2	89.1	89.5	88.0	92.0	102.9	51.2	90.5	93.1	:
1985	93.2	107.6	116.2	:	50.6	83.3	91.0	92.6	91.1	92.3	103.8	60.2	91.0	94.5	:
1986	93.0	99.9	105.9	:	55.5	87.3	89.5	94.6	89.8	90.5	94.5	68.5	91.5	92.1	:
1987	90.1	98.8	100.4	:	64.2	89.8	90.9	86.6	92.7	88.3	97.3	75.4	92.1	92.5	:
1988	92.8	102.0	99.4	:	73.4	93.3	95.7	90.2	94.3	91.0	98.8	81.3	95.8	95.3	:
1989	99.1	105.1	101.5	:	82.4	96.3	101.1	98.9	98.2	96.4	101.4	93.1	98.3	99.3	:
1990	97.3	98.5	99.0	98.6	98.8	99.8	100.5	100.0	99.4	100.6	97.7	101.4	99.3	99.4	98.9
1991	103.6	96.4	99.6	101.4	118.8	103.9	98.4	101.1	102.4	103.0	100.9	105.5	102.4	101.3	101.1
1992	104.3	100.2	97.9	97.9	137.7	107.6	98.3	101.2	102.2	105.7	101.8	96.2	103.0	102.0	101.4
1993	104.9	104.9	:	93.8	154.4	108.8	96.3	105.8	107.6	99.5	101.1	96.7	109.1	:	102.2
1994	105.8	101.6	:	92.3	168.6	116.0	96.2	112.1	109.7	100.1	99.8	98.6	110.0	:	103.4
% 94/93	0.9	-3.1	:	-1.6	9.2	6.6	-0.1	6.0	1.9	0.5	-1.3	1.9	0.8	:	0.9

(1) With Germany in its boundaries prior to 3 october 1990.
(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.33

Real value indices of intermediate consumption in agriculture from 1973 to 1994
(Indices, 1989-1991=100 with the exception of (2))

	B	DK	D (1)	D (2)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (1)	EUR12 (2)
1973	109.9	119.3	118.4	:	66.5	108.7	87.5	70.3	110.1	107.5	91.5	:	141.8	:	:
1974	106.9	114.7	114.9	:	70.9	111.2	99.8	81.0	126.3	106.5	92.2	:	150.3	:	:
1975	100.7	114.0	114.5	:	78.6	100.4	91.0	78.8	124.7	116.8	86.2	:	133.6	:	:
1976	104.2	125.4	129.3	:	76.9	102.2	94.8	88.0	132.1	123.8	91.8	:	140.6	:	:
1977	100.5	124.6	133.6	:	78.8	97.5	97.2	103.6	134.1	117.3	92.3	:	144.5	:	:
1978	94.4	122.0	128.2	:	76.5	92.2	98.6	112.4	135.2	102.1	90.6	:	134.9	:	:
1979	96.9	129.9	137.5	:	83.6	92.8	101.9	122.6	137.9	97.6	97.7	:	133.9	:	:
1980	99.6	132.8	137.9	:	98.8	96.2	106.2	108.3	142.1	99.8	103.3	97.3	122.3	116.6	:
1981	102.2	137.8	140.7	:	103.8	109.4	107.8	111.5	142.3	103.5	105.3	108.4	115.8	119.3	:
1982	108.0	140.1	139.7	:	97.2	109.6	107.9	106.6	138.1	98.8	103.2	109.2	122.7	119.3	:
1983	111.0	141.6	140.0	:	104.1	115.0	109.7	108.5	136.0	112.0	108.7	114.2	129.0	121.9	:
1984	113.5	137.8	138.9	:	102.8	120.2	112.5	109.1	133.4	110.6	109.5	117.8	125.7	122.5	:
1985	108.6	130.0	131.2	:	107.0	118.9	108.6	107.4	127.0	107.7	108.5	113.0	119.3	118.0	:
1986	104.3	115.4	115.9	:	99.8	112.1	101.4	103.6	116.0	101.7	98.6	109.2	116.2	109.2	:
1987	98.8	109.1	107.9	:	101.0	109.0	99.9	92.6	112.9	100.2	102.1	108.1	111.3	105.8	:
1988	99.9	108.9	105.2	:	99.9	107.1	102.0	93.6	107.7	99.3	102.4	105.2	109.2	104.8	:
1989	102.0	107.6	104.9	:	99.8	103.3	104.2	98.2	105.7	99.3	103.8	108.1	104.6	104.3	:
1990	97.2	98.4	99.1	100.5	98.9	99.7	100.4	100.9	99.3	100.6	97.8	100.4	99.3	99.4	101.4
1991	100.8	94.0	96.0	99.5	101.3	97.0	95.4	100.9	95.0	100.1	98.4	91.6	96.1	96.3	98.6
1992	98.0	95.8	90.4	91.2	102.2	94.3	93.1	99.7	90.8	98.2	96.7	73.6	92.6	93.0	94.7
1993	94.5	98.6	:	84.1	100.8	91.4	89.2	100.6	91.6	90.6	94.5	68.9	94.9	:	92.0
1994	93.6	94.0	:	80.5	99.5	94.1	87.7	103.6	90.2	88.6	91.6	66.8	93.7	:	90.4
% 94/93	-0.9	-4.6	:	-4.3	-1.4	3.0	-1.6	3.0	-1.5	-2.2	-3.1	-3.0	-1.3	:	-1.7

(1) With Germany in its boundaries prior to 3 october 1990.
(2) With Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.34

Trends in productivity of intermediate consumption (1) from 1973 to 1994
(Indices, 1989-1991=100 with the exception of (3))

	B	DK	D (2)	D (3)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (2)	EUR12 (3)
1973	104.2	84.4	98.6	:	125.5	141.3	98.3	105.2	119.6	113.7	92.0	:	92.4	:	:
1974	107.5	97.9	101.3	:	122.8	128.8	92.5	119.0	118.6	113.1	94.9	:	93.4	:	:
1975	99.2	87.4	99.3	:	120.3	125.1	92.8	127.2	121.5	114.2	92.6	:	87.1	:	:
1976	98.4	81.0	93.9	:	114.2	120.1	90.3	113.1	112.7	101.7	91.2	:	85.9	:	:
1977	98.8	85.6	94.2	:	103.3	113.2	92.1	112.5	108.5	109.8	90.5	:	89.5	:	:
1978	101.8	81.4	93.8	:	108.8	111.8	93.7	103.1	104.0	118.7	91.2	:	92.8	:	:
1979	100.7	77.9	90.2	:	103.0	106.1	98.4	89.9	104.3	120.2	91.3	:	92.7	:	:
1980	101.7	82.5	91.3	:	108.5	107.5	95.6	99.5	105.0	117.2	88.3	93.6	97.1	97.5	:
1981	103.3	86.2	92.7	:	106.0	95.4	94.7	94.4	105.4	122.0	94.3	85.3	97.8	96.7	:
1982	104.4	88.8	99.8	:	106.0	96.3	103.9	101.1	104.0	136.9	97.9	91.7	97.8	100.2	:
1983	103.8	84.9	95.3	:	98.4	99.1	101.3	99.8	109.7	119.9	90.3	94.0	94.0	98.8	:
1984	105.9	94.2	98.7	:	101.7	100.6	102.4	108.3	103.9	123.4	99.1	99.6	102.6	101.1	:
1985	104.6	93.7	95.5	:	102.7	105.0	103.0	105.7	103.3	117.1	93.4	103.5	99.3	100.5	:
1986	105.0	96.7	100.6	:	108.1	95.8	101.7	97.8	103.2	114.1	94.8	103.3	96.9	99.8	:
1987	100.0	90.7	95.0	:	101.4	102.6	101.4	103.0	102.5	106.2	80.8	102.0	96.1	98.0	:
1988	101.9	96.1	98.7	:	104.7	105.6	98.5	103.1	99.1	103.8	84.8	92.0	95.4	98.2	:
1989	101.1	99.4	99.0	:	105.5	99.9	99.7	91.6	99.5	105.0	97.5	95.1	97.4	99.2	:
1990	99.2	100.8	99.8	99.2	90.9	101.7	100.6	104.7	98.0	101.0	101.1	100.7	100.6	99.8	99.4
1991	99.7	99.8	101.2	100.9	103.6	98.4	99.7	103.7	102.5	94.2	101.4	104.2	102.1	101.0	100.6
1992	103.4	92.7	105.9	110.2	99.8	95.8	106.3	108.5	105.7	102.0	102.8	106.3	105.3	103.7	104.1
1993	104.6	98.6	:	109.8	94.5	104.7	101.7	100.8	104.2	100.1	104.0	100.6	102.3	:	103.6
1994	100.7	98.8	:	108.9	96.9	98.7	100.8	94.2	101.8	98.9	103.2	103.2	102.5	:	102.0
% 94/93	-3.7	0.2	:	-0.8	2.6	-5.8	-0.9	-6.5	-2.3	-1.2	-0.7	2.5	0.2	:	-1.5

(1) Index of the volume of final output divided by the index of the volume of intermediate consumption.

(2) Germany in its boundaries prior to 3 october 1990.

(3) Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.35

Trends in "terms of trade" of agriculture (1) from 1973 to 1994
(Indices, 1989-1991=100 with the exception of (3))

	B	DK	D (2)	D (3)	GR	E	F	IRL	I	L	NL	P	UK	EUR12 (2)	EUR12 (3)
1973	104.7	116.3	115.0	:	105.1	86.3	139.2	125.9	101.4	104.7	107.2	:	113.1	:	:
1974	92.2	99.7	105.9	:	98.0	84.0	123.8	94.1	90.0	91.2	94.8	:	103.1	:	:
1975	101.4	103.3	112.3	:	92.1	94.3	122.9	101.5	90.3	87.7	104.4	:	112.3	:	:
1976	104.0	106.4	112.9	:	103.2	96.6	122.9	102.9	92.0	86.0	105.9	:	118.9	:	:
1977	97.5	104.7	108.4	:	105.2	109.6	118.0	104.5	94.9	86.3	103.2	:	110.1	:	:
1978	99.7	113.7	109.2	:	111.6	114.4	117.4	110.3	100.4	88.2	102.2	:	108.3	:	:
1979	95.8	108.5	104.8	:	105.1	109.4	111.2	108.5	100.2	88.6	94.8	:	107.6	:	:
1980	94.7	102.7	100.1	:	95.5	105.1	105.2	94.4	94.4	83.1	94.6	131.9	101.9	94.7	:
1981	94.5	99.4	98.7	:	94.7	97.8	104.9	95.6	89.4	81.4	94.9	128.3	105.2	94.6	:
1982	92.7	100.5	97.1	:	99.9	102.5	102.5	93.3	89.9	87.2	93.8	122.7	104.5	95.3	:
1983	94.4	98.1	94.9	:	95.3	96.3	100.0	93.9	88.5	82.3	97.8	109.9	100.4	93.5	:
1984	90.6	98.3	92.7	:	98.8	95.0	95.8	89.9	88.1	80.1	91.8	102.7	98.7	91.8	:
1985	91.2	97.3	93.4	:	98.3	91.4	95.4	85.7	90.6	86.0	96.4	98.9	95.8	92.1	:
1986	91.8	100.8	95.6	:	95.8	99.1	98.6	90.1	95.6	91.7	103.0	99.4	100.2	96.7	:
1987	95.7	100.4	96.9	:	95.8	94.8	97.8	98.7	96.4	97.9	113.6	103.7	102.5	98.1	:
1988	94.6	95.5	98.9	:	95.0	97.6	97.6	104.2	97.1	100.3	109.2	105.0	99.6	98.3	:
1989	102.0	98.0	103.6	:	98.9	101.0	99.8	114.2	98.0	103.8	101.4	104.0	103.0	100.4	:
1990	99.7	101.3	99.3	102.2	100.8	100.5	100.9	94.3	99.6	102.6	99.7	101.2	101.3	100.3	100.7
1991	98.3	100.9	97.1	97.9	100.1	98.6	99.4	91.8	102.3	93.7	98.9	95.3	96.0	99.4	99.3
1992	93.3	101.2	93.1	91.1	89.8	90.8	91.4	93.8	98.2	91.5	94.4	91.0	94.7	94.3	93.9
1993	90.1	86.4	:	87.2	89.4	84.7	87.9	99.3	93.2	95.1	89.5	90.9	92.9	:	90.2
1994	94.7	89.5	:	88.2	93.7	91.3	90.5	99.1	93.9	93.2	94.5	93.3	93.8	:	93.1
% 94/93	5.0	3.5	:	1.2	4.8	7.8	3.0	-0.3	0.8	-2.0	5.6	2.6	1.0	:	3.2

(1) Index of nominal prices of final output divided by the index of nominal prices of intermediate consumption.

(2) Germany in its boundaries prior to 3 october 1990.

(3) Germany in its boundaries after 3 october 1990, (Indices, 1990-1991=100).

Table A.36

Volume of total labour input in agriculture in annual work units (AWU) from 1973 to 1994 in 1000

	B	DK (1)	D (2)	D (3)	GR	E	F	IRL (4)	I	L	NL	P (5)	UK	EUR12 (2)	EUR12 (3)
1973	149.0	182.8	1320.2	:	1116.0	2537.7	2147.0	348.4	3407.5	12.7	286.0	1282.7	584.6	13374.6	:
1974	143.3	170.1	1265.4	:	1092.0	2454.0	2078.0	333.4	3336.7	12.2	281.0	1254.4	562.0	12982.5	:
1975	137.2	162.4	1233.6	:	1068.0	2279.7	2008.0	324.7	3209.1	11.5	277.5	1225.5	522.6	12459.8	:
1976	130.5	157.2	1203.0	:	1045.0	2101.9	1965.0	321.8	3207.5	10.8	273.7	1245.7	526.0	12188.2	:
1977	124.9	151.0	1153.0	:	1022.0	1959.0	1926.0	318.9	3094.4	10.6	265.9	1208.9	543.8	11778.4	:
1978	120.8	145.2	1105.1	:	999.0	1898.3	1895.0	316.1	3094.5	10.1	259.9	1143.9	543.9	11531.7	:
1979	120.3	139.4	1053.1	:	978.0	1774.9	1864.0	313.2	3044.4	9.7	256.5	1141.9	532.3	11227.6	:
1980	115.6	132.8	1029.6	:	956.0	1634.7	1817.0	310.3	2938.8	9.2	254.3	1133.5	518.3	10850.0	:
1981	112.4	126.8	1015.8	:	935.0	1487.5	1768.0	298.9	2751.6	8.6	249.3	1071.2	506.7	10331.8	:
1982	110.2	119.4	991.9	:	924.0	1432.5	1720.0	287.5	2593.4	8.3	248.0	1035.8	501.4	9972.3	:
1983	109.4	118.1	945.9	:	917.0	1415.0	1671.0	276.1	2645.8	7.9	248.3	958.5	497.1	9810.1	:
1984	108.7	115.0	930.8	:	918.0	1341.9	1620.0	276.0	2598.7	7.5	246.7	962.4	489.1	9614.9	:
1985	106.1	110.8	917.9	:	931.0	1300.4	1564.0	275.8	2494.1	7.3	245.4	966.3	486.1	9405.2	:
1986	104.8	106.9	904.1	:	898.0	1252.1	1509.0	265.2	2473.4	7.0	242.7	892.1	477.3	9132.6	:
1987	101.6	102.7	850.7	:	849.0	1218.0	1455.0	254.5	2422.9	6.7	240.5	931.1	465.6	8898.3	:
1988	98.3	96.9	837.0	:	851.0	1191.2	1401.0	250.6	2313.2	6.4	237.4	891.1	457.1	8631.2	:
1989	96.0	99.2	786.8	:	770.4	1137.5	1343.7	261.5	2194.3	6.3	237.5	845.5	445.2	8223.9	:
1990	94.2	98.9	760.0	1229.1	752.4	1070.7	1288.6	257.6	2153.3	6.0	236.8	793.2	436.2	7947.9	8417.0
1991	91.9	95.5	718.0	1028.5	683.7	961.5	1230.8	253.7	2156.3	5.8	236.9	788.9	423.8	7646.8	7957.3
1992	88.0	93.5	689.1	863.6	718.0	914.5	1176.2	247.1	2051.6	5.5	239.0	737.3	418.1	7377.9	7552.4
1993	85.7	92.7	650.0	796.0	701.5	835.4	1109.9	242.2	1909.7	5.4	236.3	727.0	415.1	7010.9	7156.9
1994	83.5	88.4	:	740.0	679.9	812.0	1071.7	230.1	1889.6	5.2	230.2	730.9	406.5	:	6967.9
% 94/93	-2.6	-4.6	:	-7.0	-3.1	-2.8	-3.4	-5.0	-1.1	-4.5	-2.6	0.5	-2.1	:	-2.6

(1) Eurostat estimate for the period 1973-1980.
(2) With Germany in its boundaries prior to 3 october 1990.
(3) With Germany in its boundaries after 3 october 1990.
(4) Eurostat estimate for the period 1973-1991.
(5) Eurostat estimate for the period 1973-1978.

Table A.37

Volume of family labour input in agriculture in annual work units (AWU) from 1973 to 1994 in 1000

	B	DK (1)	D (2)	D (3)	GR	E	F	IRL (4)	I	L	NL	P (5)	UK	EUR12 (2)	EUR12 (3)
1973	140.6	150.0	1185.5	:	974.0	1935.3	1824.0	314.3	2237.7	12.1	237.5	1091.8	336.0	10438.8	:
1974	134.8	138.4	1136.3	:	956.0	1871.4	1771.0	299.6	2207.3	11.7	232.3	1067.7	321.2	10147.7	:
1975	128.6	131.4	1102.8	:	939.0	1738.5	1716.0	291.9	2146.0	11.0	228.9	1042.9	291.8	9768.9	:
1976	121.9	126.7	1075.5	:	922.0	1602.9	1675.0	288.5	2131.9	10.3	224.9	1060.2	297.1	9537.0	:
1977	116.2	121.0	1035.4	:	906.0	1493.9	1639.0	285.1	2055.8	10.1	217.1	1028.7	316.5	9224.8	:
1978	112.0	115.6	992.4	:	889.0	1447.6	1610.0	281.7	2111.0	9.6	210.3	973.2	319.0	9071.4	:
1979	111.2	110.3	936.2	:	874.0	1353.5	1581.0	278.3	2095.4	9.1	207.0	990.8	312.6	8859.4	:
1980	105.9	105.1	919.4	:	858.0	1246.6	1534.0	274.9	2069.9	8.6	203.7	983.8	304.4	8614.2	:
1981	103.5	100.5	897.0	:	843.0	1134.4	1492.0	264.0	1940.2	8.0	198.8	929.8	299.8	8211.1	:
1982	101.0	94.7	877.8	:	827.0	1092.4	1451.0	253.1	1807.1	7.7	197.1	899.1	298.6	7906.6	:
1983	99.8	91.8	837.1	:	813.0	1079.1	1409.0	242.2	1880.0	7.3	197.6	816.4	297.4	7770.7	:
1984	98.8	87.9	829.3	:	808.0	1023.4	1366.0	241.5	1864.6	6.9	196.5	819.7	297.1	7639.7	:
1985	96.2	84.2	804.1	:	803.0	991.7	1319.0	240.7	1767.8	6.7	193.7	823.0	297.1	7427.2	:
1986	94.2	80.7	792.9	:	781.0	954.9	1272.0	232.3	1766.5	6.4	189.4	759.6	297.4	7227.2	:
1987	90.9	77.3	750.3	:	729.0	928.9	1225.0	223.8	1729.7	6.1	186.0	793.0	290.1	7030.1	:
1988	88.0	73.2	732.4	:	732.0	908.4	1179.0	222.9	1633.8	5.8	182.6	758.9	286.5	6803.4	:
1989	85.7	74.1	684.5	:	706.6	867.5	1123.6	236.0	1502.6	5.7	179.8	720.0	281.2	6467.2	:
1990	83.4	73.5	667.3	777.5	691.7	816.5	1070.8	235.1	1466.4	5.3	176.7	664.6	274.0	6225.4	6335.5
1991	81.5	70.9	634.7	650.6	627.7	733.3	1017.1	234.2	1495.9	5.1	174.0	667.9	267.8	6010.1	6026.0
1992	77.6	68.9	609.2	628.0	662.9	697.4	966.4	228.1	1388.4	4.9	174.4	617.8	266.9	5762.9	5781.7
1993	75.2	68.0	571.0	591.0	649.0	637.1	903.9	223.5	1303.3	4.7	171.1	624.0	265.9	5496.7	5516.7
1994	73.1	64.9	:	560.0	630.0	611.0	869.6	212.3	1305.9	4.6	166.4	638.9	262.9	:	5399.4
% 94/93	-2.9	-4.6	:	-5.2	-2.9	-4.1	-3.8	-5.0	0.2	-3.4	-2.8	2.4	-1.1	:	-2.1

(1) Eurostat estimate for the period 1973-1980.
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