



Table 3: Summary of organic and conventional livestock enterprise net margins (£/head), 2009/10

£ per head	Dairy lowland		LFA sheep hi-output		LFA suckler stores		Lowl. suckler finishing	
	O	C	O	C	O	C	O	C
Output	1782	1659	87	77	649	686	896	1244
Var. costs	796	800	35	36	289	381	350	680
Gross mar.	986	860	52	41	360	305	546	563
Fixed costs	701	606	70	39	587	420	931	821
Total costs	1498	1406	105	76	877	801	1281	1501
Net margin	284	254	-18	2	-227	-115	-385	-257
Imp. costs⁵	310	340	31	38	322	380	549	610
Adjust NM	-26	-87	-48	-37	-550	-495	-934	-867
Other*	257	180	63	39	919	556	912	668
Final NM	231	93	14	2	369	61	-22	-199

⁵ imputed costs for farmer's own labour, land and capital

* includes support payments and by-product and forage values

Crop net margin results were quite mixed in 2009/10, but in general output prices and costs were lower in 2009/10. When support payments are included, organic enterprises appear to outperform their conventional counterparts.

Table 4: Summary of organic and conventional crop enterprise net margins (£/ha), 2009/10

£ per ha	Winter wheat		Spring barley		Feed beans		Maincrop potatoes	
	O	C	O	C	O	C	O	C
Output	902	909	613	591	631	503	6012	4040
Var. costs	121	473	102	310	128	226	1695	1986
Gross mar.	781	436	511	281	503	277	4316	2054
Fixed costs	650	562	507	513	564	398	2375	1683
Total costs	771	1035	608	823	692	624	4071	3669
Net margin	131	-126	5	-232	-61	-121	1941	371
Imp. costs⁵	156	167	91	146	113	130	483	592
Adjust NM	-25	-293	-87	-378	-173	-251	1459	-220
Other*	367	315	355	326	354	313	364	326
Final NM	342	22	368	-52	181	62	1823	106

⁵ imputed costs for farmer's own labour, land and capital

* includes support payments and by-product and forage values

Overall, livestock net margins remained negative in 2009/10, but were similar to conventional levels, whilst 2009/10 crop net margin results were mixed but remained significantly above conventional levels.

Comparing production costs across the EU

Catherine Gerrard and Susanne Padel report on recent working comparing production costs for different organic products across the EU as part of the Farm Accountancy Cost Estimation and Policy Analysis of European Agriculture (FACEPA) project.

The main products considered were milk, wheat and potatoes and the countries were UK, Denmark, Sweden, Poland, France, Italy, and Netherlands (Table 1). The data were obtained for the year 2006 and all currencies were converted to Euros for ease of comparison.

The results show that feed costs vary between 4.34 Euro cents per litre in Poland and 17.5 Euro cents per litre in Denmark with the UK in the lower half with 7.5 which is reflected in the total variable costs for milk production. Of the countries compared, the UK has the highest yields for wheat production and the second lowest direct costs after Poland. Also potato yields are highest in the UK but the direct costs are also second highest in total. There are two main lessons to be learnt from these tables and from our data collection over the last few months.

Variation between countries

Costs vary considerably between the countries and this could be a result of the nature of the agriculture and the economy of the country involved. In both France and Italy the agriculture is highly regionalised with large variations across the country. Indeed in Italy the milk yields found in a literature review carried out by a visiting researcher in the summer (Dr Francesca Alberti from Ancona University) varied from 2751kg per year to 8524kg per year (Salvadori del Prato, 2007). Also costs in one area of Italy can be very different from those in another.

In Poland, costs in general are low compared with other countries and the costs of seeds are particularly low because organic seeds are not available and therefore the farmers are allowed to buy conventional seed. Poland

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looks like an extremely attractive place to farm if we look at costs alone, but costs of living are not factored in. Polish dairy farms may be difficult to compare with the UK as in 2006 the average number of dairy cows in Poland was just 6.5 compared with 126 in the UK.

There can also be variation from country to country depending on environmental, economic or agricultural conditions in specific countries in a particular year. For instance in France in 2007 the potato crops were badly affected by blight (Euvrard, 2010) and so yields were low and costs of crop protection high making comparison of costs with other countries not affected very difficult. Data for 2006 – the same year as used in the other countries were not available. With the exception of Poland, seed costs for wheat were similar, but fertiliser and soil improvement costs varied considerably and the costings provided to us are not detailed enough to understand why.

Data collection and classification

The second lesson is that different countries collect and classify their data in different ways so that comparison can be difficult, if not impossible. This is particularly true for indirect costs (such as electricity, fuel use, machinery maintenance and depreciation) at enterprise level. Such costs are notoriously difficult to allocate to a specific enterprise, so different ways to do this exist (e.g. based on average use per hectare, on livestock units, on farmer estimates etc). We did not have indirect cost data for all countries for organic enterprises. In those countries where we did they may not have been allocated to the enterprises in the same way, so the data are not strictly comparable.



Many countries include a calculated “family labour” cost in their overall labour cost, where in the UK this is kept separate as an “imputed cost” and in other countries it may be ignored completely. Denmark and France summarise labour and machinery costs in one category, so the data has now been summed up in the table for wheat in the same way. Table 1 shows higher costs per hectare than in the UK for machinery and labour in Denmark, but lower costs in France and Sweden.

Discussion and conclusions

All of this makes comparison across countries extremely difficult. In the future it would be very useful to researchers and farmers if standardised data collection for enterprise data would be used across Europe. However, it can be interesting to compare the data and see what we can learn about the situation in other countries from these data. As the FACEPA project continues these data will be analysed further. A next step of the project will be looking at the role of the structure of, and the political environment for, the organic farming sector in view of the estimation results for production costs on organic farms. This will include

further analysis of how the structure and characteristics of the organic sector relate to production costs: (e.g. specialised vs. diversified; agglomeration vs. sparse organic sector; importance of direct marketing vs. wholesale market oriented) and analysing the relation between the provision of ecosystem services, based on a set of environmental indicators, and production costs. Hopefully this analysis will provide further insights into the factors underlying production costs of organic farming.

Further information on the FACEPA project can be found on its web page at <http://www2.ekon.slu.se/facepa/index.html>.

References

- Euvrard, Robin, "La Pomme de terre biologique de plein champ: entre diversite de systemes et performances technico-economiques" presente par Robin Euvrard, maitres de stages Jean-Francois Garnier & Delphine Bouttet. Part of the Arvalis Institut du Vegetal's Project CASDAR.
- Salvadori del Prato, Difficile quadrare i conti quando il latte e' biologico. Terra e Vita n 5/2007, http://www.ilgranoduro.it/osservatorio_filiera.aspx?num=4

Table 1: Production cost data for milk, wheat and potatoes in selected EU countries, 2006

Country (Source)	United Kingdom	Denmark	Sweden	Poland	France	Italy	Netherlands
Dairy productions costs (€/cow unless otherwise indicated)							
Region	England & Wales (E&W)	All	All	All	All	Firenze	All
Source	Farm Business Survey (FBS)	Videncentral for Landbrug	Jordbruksverket (JBV)	FADN	Institut de l'elevage	Chiorri et al.	LEI
Yield (kg/cow)	5283	7200	8000	3341	4762		6130
Feed (cent/l)	7.08	15.01	11.26	4.34	5.50		7.98
Total direct (cent/l)	10.71	17.25	13.91	7.81	7.79		12.48
Feed	374	1081	901	145	262	654*	489
Vet & med.	37	161	133	20	24		108
Total direct	566	1242	1113	261	371	684	765
Energy	76		86	71	49	110	147
Interest	37		37		54		792
Contractors	119			23	26	80	154
Other misc.	117		150	223	166	780	411
Labour	387		908	14	184	1395	956
Depreciation	146				321		468
Wheat productions costs (€/ha unless otherwise indicated)							
Region	E&W	All	All	All	All	Firenze	n/a
Source	FBS	Landsbroginfo	JBV	FADN	ChAg Drome	Ilgranoduro.it	n/a
Yield (t/ha)	5	3.7	2.5	2.56	5.5	2.5	
Seeds	82	78	84	23	80	83	
Fertilisers	9	75	140	7	310	42-53	
Crop protection	1						
Total direct costs	92	153	225	30	390	135	
Irrigation					40		
Other energy	7			8			
Interest	35		19			12	
Machinery & labour	639	794	344	70	331		
Other costs	76		72	114		340	
Potato productions costs (€/ha unless otherwise indicated)							
Region	E&W	All	All	All	n/a	n/a	n/a
Source	FBS	Landsbroginfo	JBV	FADN			
Yield t/ha	27	20	14.4	9.1			
Costs	per ha	per ha	per ha	per ha			
Seeds	1328	841	1738	311			
Pre-sprouting			130				
Fertilisers	91	75	180	20			
Crop protection	96		108				
Total direct costs	1515	916	2156	330			
Other energy	31			46			
Other costs	424		2066	635			
Interest	62		73				
Machinery & labour	5275	2656	654	525			

*Includes veterinary costs