

CROPS COSTS AND RETURNS 2008

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CROP MARGINS

Awareness of crop margins is vitally important since under the decoupled regime the Single Farm Payment (SFP) will be paid irrespective of what crop is grown. Moreover, it makes no sense to produce the crop at a loss. The bottom line is that the land must be maintained in “good agricultural and environmental condition”.

Note: The margins shown here do not include the SFP. Prices may vary considerably from those predicted under the present volatile market developments.

The margins given here should provide a useful guide but land suitability, rotation, risk avoidance and convenience should also be considered. There is little difference in margins between spring and winter feed cereals. Bonuses for quality are important. In the case of malting barley the availability of contracts and fulfilment of contract requirements may limit the attainment of these margins.

Stacking (consolidation) is a provision where Irish farmers can get their full Single Farm Payment without the need to farm all the land they farmed in the reference years 2000-2002. At least 50% of the allocated entitlements from the reference years must be farmed. Farmers can only stack if they dropped rented or leased land, afforested land since 2000 or lost land due to compulsory acquisition for public good (CPO). Stacking applies to all farming enterprises. As over one-half of arable land farmed is on rented ground this provision has major implications for the price of rented land for tillage.

Stacking may be availed of any year up to 2012. In future years the stacked grower may rent additional land (if profitable) without compromising his stacked (consolidated) entitlements.

Conacre appraisal

The following table will provide a transparent exposition for growers and land owners as to what price can be paid for conacre.

1	Entitlement Value	
2	Gross Margin achievable	
3	Land problems, fertility, pH, P, K, trace elements, weeds, scutch, WO, other grassweeds	
4	€ available for rent + farming	(1+2)-3

Costs

Level of yield has a major influence on profitability. Decisions on input strategies must be tailored for individual fields and farms.

Timeliness and attention to detail in carrying out all operations are vital to maintaining profitability in crop production. All costs (direct and fixed) need to be kept to a minimum, consistent with good husbandry practices. Fixed costs will need closer attention. In particular, investments in machinery and land/conacre will need thorough financial appraisal before a decision is taken. Labour efficiency must be scrutinised.

CEREAL CROP MARGINS 2008
Variable Costs excl. VAT (€/Hectare)

WHEAT		FEED			FEED OATS	
Feed Winter	Milling Spring	BARLEY		MALTING BARLEY	Winter	Spring
		Winter	Spring			

MATERIALS	680	523	602	411	411	536	468
Seed	79	93	88	85	85	88	88
Fertilisers	339	259	315	208	208	276	208
Sprays:							
Herbicides	53	38	53	38	38	26	26
Fungicides	160	107	96	64	64	117	117
Insecticides	36	20	22	16	16	16	16
Growth Regulators	13	6	28	0	0	13	13
HIRE MACHINERY	419	401	385	365	365	385	385
Plough, Till and Sow	150	150	150	150	150	150	150
Spray	90	72	74	54	54	74	74
Fertiliser Spreading	54	54	36	36	36	36	36
Harvesting	125	125	125	125	125	125	125
MISCELLANEOUS	82	59	73	49	49	63	50
Interest (7%)	32	15	29	12	12	26	13
Transport (€5/Tonne)	50	44	44	37	37	37	37
TOTAL VARIABLE COSTS	1181	983	1060	825	825	984	903
Tonnes to cover variable costs	6.9	5.5	6.6	5.2	4.6	6.1	5.6
Net Price (€/Tonne)	170	180	160	160	180	160	160
AID (SFP)=NOT included	0	0	0	0	0	0	0
Straw (€/ha)	75	65	100	90	90	90	90

Gross Margins (€/Hectare)

Tonnes/Hectare	WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Feed Winter	Milling Spring	BARLEY			Winter	Spring
			Winter	Spring			
6.0	-86	162	0	225	345	66	147
7.0	84	342	160	385	525	226	307
8.0	254	522	320	545	705	386	467
9.0	424	702	480	705	885	546	627
10.0	594	882	640			706	
11.0	764						

EXPLANATORY NOTES - CEREAL CROPS

Fixed or Overhead Costs per Hectare

Scutch Control €16, Lime €16, Maintenance of Land and Fences, Car, Phone, ESB and regular hired labour? Total €135+. Fixed costs have to be subtracted from gross margin to give income.

VAT is excluded from input costs and outputs

Input Costs: Cereals

Seed:	€565/t Blue Label	
Rate:	W.Wheat – 140 kg/ha; W. Barley & Oats – 155 kg/ha; S. Barley – 150 kg/ha; S.Wheat – 165 kg/ha	
Fertiliser:	W. Cereals, 340 kg/ha 0-10-20 @ €340/t	=€125.8
	W. Wheat 710kg/ha CAN (27% N) @ €300/t	=€213.0
	W. Barley 630 kg/ha CAN	=€189.0
	W.Oats – 500 kg/ha CAN	=€150.0
	S. Cereals 370 kg/ha 14-7-14 or 18-6-12 @ €400/t	=€148.0
	Topdress S. Wheat – 370 kg/ha CAN	=€111.0
	S. Oats and S. Barley – 200 kg/ha CAN	=€ 60.0
Herbicides:	W.Wheat & W.Barley €53; S.Wheat & S.Barley €38; Oats €26	
Fungicides:	<u>Winter Wheat:</u> T0: Bravo + Opus	= €20.0
	T1: Eyespot + B.S. + Bravo Growth Stage 31-32	= €52.0
	T2: Broad Spectrum + Bravo. Growth Stage 37-39	= €42.0
	T3: Strob.+ triazole, Growth Stage 55-60	= €46.0
		€160/ha
	<u>Spring Wheat:</u>	
	T1: ½ rate (B.S. + Morph.), Growth Stage 30-32	=€23.0
	T2: Broad Spectrum + Bravo. Growth Stage 37-39	=€44.0
	T3: Strob.+ triazole, Growth Stage 55-60	=€40.0
		€107/ha
	<u>Spring Barley:</u> T1: Red rate (Triazole + mildew); T2: Strob.+Bravo. = €64.0	
	<u>Winter Barley:</u> 3 Fungicides = €96.0	
	<u>Oats:</u> cyproconazole + morph at T1 + T2, B.S. + Strob. at T3 gs37-55 = €117.0	
Insecticides:	Winter wheat; Slug Pellets (€26) + Aphicide (€10) Other Cereals: Leatherjackets €10? + Aphicide (€5-10)	
Growth Regulators:	W. Wheat _ W. & S. Oats; 2.2 L/ha 750g/L CCC	= €13/ha
	Spring Wheat 1.0 L/ha	= €6
	Winter Barley	= €28
Hire Machinery:	Plough (€67), Till + Sow (€83)	= €150/ha
	Spraying	= €18/ha
	W. Wheat: Weeds + Aphids, PGR, Fungicide x 3	= €90
	S. Wheat: Weeds + Aphids, Fungicide x 3	= €72
	W. Barley: Aphids+ Weeds, Fungicide x 3	= €72
	S. Barley: Weeds + Aphids, Fungicide x 2	= €54
	W.Oats: Weeds Aphids, Fungicide x 3	= €72
	Fertiliser Spreading (@ €18/ha	=€36-54

Interest 7%: Seed + Fertiliser + 0.5 Sprays; Winter - 10 months; Spring 6 months

CEREAL CROP MARGINS 2008

Variable Costs excl. VAT (€/Acre)

	WHEAT		FEED BARLEY		MALTING BARLEY	FEED OATS	
	Feed Winter	Milling Spring	Winter	Spring		Winter	Spring
MATERIALS	275	212	244	166	166	217	189
Seed	32	38	36	34	34	36	36
Fertilisers	137	105	127	84	84	112	84
Sprays:							
Herbicides	21	15	21	15	15	11	11
Fungicides	65	43	39	26	26	47	47
Insecticides	15	8	9	6	6	6	6
Growth Regulators	5	2	11	0	0	5	5
HIRE MACHINERY	170	162	156	148	148	156	156
Plough, Till and Sow	61	61	61	61	61	61	61
Spray	36	29	30	22	22	30	30
Fertiliser Spreading	22	22	15	15	15	15	15
Harvesting	51	51	51	51	51	51	51
MISCELLANEOUS	33	24	30	20	20	25	20
Interest (7%)	13	6	12	5	5	11	5
Transport (€5/tonne)	20	18	18	15	15	15	15
TOTAL VARIABLE COSTS	478	398	429	334	334	398	365
Tonnes to cover variable costs	2.8	2.2	2.7	2.1	1.9	2.5	2.3
Net Price (€/tonne)	170	180	160	160	180	160	160
AID (SFP)=NOT included	0	0	0	0	0	0	0
Straw (€/ac)	30	26	40	36	36	36	36

Gross Margins (€/ac)

Tonnes/acre	WHEAT		FEED BARLEY		MALTING	FEED OATS	
	Feed	Milling	Winter	Spring	BARLEY	Winter	Spring
	Winter	Spring					
2.4	-35	66	0	91	140	27	59
2.8	34	138	65	156	212	92	124
3.2	103	211	130	221	285	156	189
3.6	172	284	194	285	358	221	254
4.0	240	357	259			286	
4.5	309						

NON CEREAL CROP MARGINS 2008

Variable Costs excl. VAT (€/Acre)

	S. BEET	Potatoes	PEAS	BEANS		OILSEED RAPE	
		Maincrop	BATCH	Winter	Spring	Winter	Spring
MATERIALS	389	979	213	173	167	236	162
Seed	61	400	85	67	67	30	28
Fertilisers	138	280	51	51	51	145	125
Sprays:							
Herbicides	69	61	49	20	20	36	6
Fungicides	13	190	26	32	26	16	0
Insecticides	22	49	2	2	2	7	3
HIRE MACHINERY	250	854	152	140	140	184	152
Plough, Till and Sow	85	304	61	61	61	61	61
Roll	0	0	7	0	0	7	7
Spray	29	131	22	22	22	29	22
Fertiliser Spreading	15	15	7	7	7	15	7
Swathing	0	0	0	0	0	22	0
Harvesting	121	405	55	51	51	51	55
MISCELLANEOUS	117	121	21	22	17	21	11
Interest (7%)	16	40	6	6	6	10	4
Transport (€5/tonne)	101	81	10	12	11	9	6
Bird Control	0	0	4	4	0	3	0
TOTAL VARIABLE COSTS	756	1955	386	335	324	441	325
Output to cover variable costs							
Tonnes/ac	19.9	7.8	1.6	1.6	1.5	1.4	1.0
Net Price (€/tonne)	38	250	240	210	210	320	320
AID (SFP)=NOT included			22	22	22	51	51

Gross Margiins €/ac

	BEET	Potatoes	PEAS	BEANS	BEANS	OILSEED RAPE	
Tonnes/acre		Maincrop	BATCH	Winter	Spring	Winter	Spring
(Beet, potatoes)	0.8						-15
12	1.2	1081					115
14	1.6	1586	25	27	38	128	244
16	2.0	2092	122	112	123	257	374
20	2.2	3104	171	154	166	322	438
24	2.4	4116	220	197	208	387	503
26	2.6	4622	268	239	251	452	
28	2.8	321	317	282	293		

CEREAL CROP BUDGETS

Variable Costs excl. VAT (€/Acre)

		WINTER WHEAT		SPRING BARLEY		ANOTHER CROP	
		Actual	Budget	Actual	Budget	Actual	Budget
MATERIALS							
A=B+C=D+E+F+G	A		275		166		
Seed	B		32		34		
Fertilisers	C		137		84		
Sprays:							
Herbicides	D		21		15		
Fungicides	E		65		26		
Insecticides	F		15		6		
Growth Regulators	G		5		0		
HIRE MACHINERY (H=I+J+K+L)	H		170		148		
Plough, Till and Sow	I		61		61		
Spray	J		36		22		
Fertiliser Spreading	K		22		15		
Harvesting	L		51		51		
MISCELLANEOUS (M=N+O)	M		33		20		
Interest (8%)	N		13		5		
Transport (€5/Tonne)	O		20		15		
TOTAL VARIABLE COSTS (P=A+H+M)	P		478		334		
Tonnes to cover variable costs (Q=P/R)	Q						
Net Price (€/Tonne)	R		170		160		
AID (€/Acre)	S		0		0		
Straw (€/Acre)	T		30		36		
Projected Yield	U						
Gross Margins (€/Acre) (V=(R*U)+S+T-P)	V						

NON CEREAL CROP BUDGETS

Variable Costs excl. VAT (€/Acre)

		WINTER OILSEED RAPE		SPRING BEANS		ANOTHER CROP	
		Actual	Budget	Actual	Budget	Actual	Budget
MATERIALS							
(A=B+C=D+E+F+G)	A		236		167		
Seed	B		30		67		
Fertilisers	C		145		51		
Sprays:							
Herbicides	D		36		20		
Fungicides	E		16		26		
Insecticides	F		7		2		
HIRE MACHINERY							
(H=I+J+K+L+M+N)	H		184		140		
Plough, Till and Sow	I		61		61		
Rolling	J		7		0		
Spray	K		29		22		
Fertiliser Spreading	L		15		7		
Swathing	M		22		0		
Harvesting	N		51		51		
MISCELLANEOUS							
(O=P+Q+R)	O		21		17		
Interest (8%)	P		10		6		
Transport (€5/Tonne)	Q		9		11		
Bird Control	R		3		0		
TOTAL VARIABLE COSTS							
(S=A+H+O)	S		441		324		
Tonnes to cover variable costs (T+S/U)	T						
Net Price (€/Tonne)	U		320		210		
Projected Yield	V		51		22		
Gross Margins (€/Acre)							
W=(R*U)+S+T-P	W						

NON CEREAL CROP MARGINS 2008
Variable Costs excl. VAT (€/Hectare)

	BEET		Potatoes Maincrop	PEAS Batch	BEANS		OILSEED RAPE	
					Winter	Spring	Winter	Spring
MATERIALS	961	2420	527	427	412	582	401	
Seed	150	988	210	165	165	75	70	
Fertilisers	553	692	126	126	126	359	309	
Sprays:								
Herbicides	170	151	120	50	50	90	15	
Fungicides	33	469	65	80	65	40	0	
Insecticides	55	120	6	6	6	18	7	
HIRE MACHINERY	618	2110	375	347	347	455	375	
Plough, Till and Sow	210	750	150	150	150	150	150	
Roll	0	0	18	0	0	18	18	
Spray	72	324	54	54	54	72	54	
Fertiliser Spreading	36	36	18	18	18	36	18	
Swathing	0	0	0	0	0	54	0	
Harvesting(grading into store incl)	300	1000	135	125	125	125	135	
MISCELLANEOUS	289	300	51	55	42	52	26	
Interest (7%)	39	100	15	15	14	24	11	
Transport (€5/Tonne)	250	200	25	30	28	22	15	
Bird Control	0	0	11	10	0	6	0	
TOTAL VARIABLE COSTS	1868	4830	953	829	801	1089	802	
Output to cover variable costs								
Tonnes/ha	49.2	19.3	4.0	3.9	3.8	3.4	2.5	
Net Price (€/Tonne)	38	250	240	210	210	320	320	
AID (SFP)=NOT included	0	0	55.57	55.57	55.57	125	125	
Gross Margins (€/Hectare)								
	BEET		Potatoes Maincrop	PEAS Batch	BEANS		OILSEED RAPE	
Tonnes/ha					Winter	Spring	Winter	Spring
(Beet,potatoes)	2.00							-37
30	3.00		2670					283
35	4.00	-538	3920	63	67	95	316	603
40	5.00	-348	5170	303	277	305	636	923
50	5.50	32	7670	423	382	410	796	1083
60	6.00	412	10170	543	487	515	956	1243
65	6.50	602	11420	663	592	620	1116	
70	7.00	792		783	697	725		

N.B. Value of beet tops is not included in margin. These could have a grazing value of at least €60/ha.
Costings for potatoes include production (not irrigated) and grading into store only. Ware price assumed is €250/t in store in October/Nov. Value added by further grading and washing is up to growers

EXPLANATORY NOTES - NON CEREALS

	Fertilisers/hectare	Interest 7%
Beet	1235 kg beet compound + 125 kg CAN	Materials 7 mths
Peas	370 kg 0-10-20 @ €340/t	Materials 5 mths
Beans	370 kg 0-7-30 @ €340/t	Materials 6 mths
Oilseed Rape		
Winter	370 kg 10-10-20 + 500 kg Urea + S + B	Materials 7 mths
Spring	370 kg 10-10-20 + 500 kg CAN	Materials 5 mths
Potatoes		Materials 7 mths

FORAGE CROPS 2008 Variable Costs excl. VAT (€/Hectare)						
	FODDER BEET	SWEDES	KALE	RAPE	STUBBLE TURNIP	MAIZE
MATERIALS	961	468	265	235	225	609
Seed	150	70	85	55	55	185
Fertilisers	553	250	180	180	170	364
Sprays:						
Herbicides	170	90	0	0	0	60
Fungicides	33	33	0	0	0	0
Insecticides	55	25	0	0	0	0
HIRE MACHINERY	628	229	158	158	142	539
Seedbed Prep + sow	210	175	140	140	125	185
Spray	72	36	0	0	0	36
Fertiliser Spreading	36	18	18	18	17	18
Harvesting+COVERING	310	0	0	0	0	300
TOTAL VARIABLE COSTS	1589	697	423	393	367	1148
GREEN YIELD (Tonnes/hectare)						
Leaves(+roots)	124	74	37	42	25	50
DRY MATTER (Tonnes/hectare)						
UTILISED	13.0	5.2	3.7	3.5	2.5	12.6
COST (€/Tonne DM)	122	134	114	112	147	91

Covering maize with plastic mulsh will cost an extra €300/ha but will increase DM yield by 3t/ha and improve quality.

COMMENT ON FORAGE CROP COSTS

Grazed Grass is likely to continue to be the cheapest fodder at about €38/tonne DM utilised. It has the advantage of producing very good yields in most locations and of course is extremely convenient to produce and utilise.

Grass Silage: First cut grass silage can be produced at reasonable costs - approximately €94/tonne DM utilised. Grass silage costs vary considerably depending on yields. Second and third cut silage are more expensive forms of fodder (circa €110/t) where machinery has to be hired. Moreover, the variability in yield and quality of second and third cut silage has forced many farmers to consider alternatives such as maize, whole crop wheat and fodder beet.

Non Grass Silage: The cost per tonne dry matter utilised is maize €91 whole crop wheat €99 and arable silage €138. Fodder Beet roots are estimated to cost €122/tonne DM utilised.

Production from Brassicas such as swedes, kale and rape will not match the main fodder crops. Rape and kale have a reasonable cost at €112+ per tonne of DM utilised. Production from swedes can be quite variable and costs are high.

Maize produces a high yield of quality feed at lower costs than second or third cut grass silage giving improved animal performance. It is convenient as sowing and harvesting are done by contractor. Feeding can be done with existing grass silage facilities. Moreover, there are no rotational constraints and it utilises slurry very efficiently.

Convenience of growing, storing and feeding as well as animal performance are important considerations when deciding which fodder crop to grow.

The opportunity cost of land needs to be taken into account when making comparisons of fodder and bought in feed. Thus a rental charge of €350/ha may be applied for a full year in the case of grazed grass but somewhat less in the case of grass silage and brassicas.

REPS FOR TILLAGE FARMERS

REPS may add a further €150/ha to the margins in the tables. REPS payments are €234/ha for the first 20ha and €205/ha for the next 20ha. Payments depend on farm size. REPS will play a vital role in maintaining the viability of medium and small scale tillage farmers. REPS constraints on straw and stubble burning, P utilisation and the uncultivated field margin will not cause a major problem for most tillage farmers. However, the restriction on N application will need to be considered. REPS 4 farmers are only allowed 70% of the N allowance under the Nitrates Directive. However, growers can use 100% of N allowance if they put 6% of their arable area under LINNET management, subject to a maximum requirement of 2.4ha. Maximum fertilisation rates of P on tillage crops are exactly the same in REPS4 as under the Nitrates Directive. Organic fertilisers may be used to replace some or all of the N and P.

A tillage farm of 55ha could earn €10,000 from basic REPS 4 payments.

Supplementary measures in REPS 4 such as LINNET, Low Input Spring Cereals and Minimum Tillage could add a further €1,300, €1000 and €1,000, respectively. At an early stage a cost benefit analysis for each farm will be needed. The scale of operation will have a major influence on the outcome. A financial assessment is essential but quality of lifestyle considerations should not be ignored. Crop others to the REPS regime.

Organic Tillage

A mixed stock and tillage organic system is most sustainable but a stockless rotation can be practiced. Changes in regulations now force organic livestock farmers who feed concentrates to use all organic ingredients. demand for organic cereals which will continue for the foreseeable future. Growers will receive €212/ha during conversion in addition to REPS Payment. Crops harvested over 12 months after conversion date are deemed to have in-conversion status. In-conversion crops are worth almost as much as full symbol crops. Full symbol growers will receive €106/ha. Direct payments for organic production are paid yearly, based on a five-year plan. Growers can partially convert a holding and continue to farm the remaining conventionally. Non REPS growers in stockless rotations can receive additional payments of €240/ha to build fertility. Additional capital grants for machinery and equipment at a 40% rate are also available. Output is lower than conventional unit but prices for grain are higher. In a stockless rotation output for winter cereals can average €700/ha and spring cereals €490/ha excluding direct payments.