Economics of Winter Finishing

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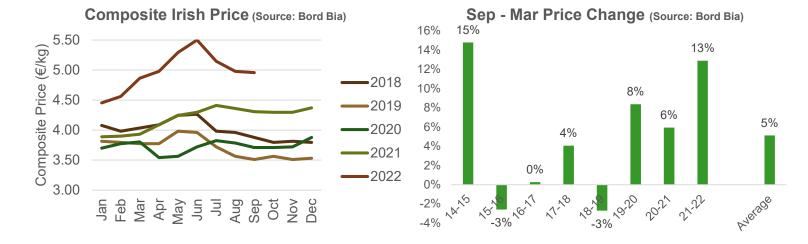
> Cillin Hill, Kilkenny 13 September 2022



Key factors

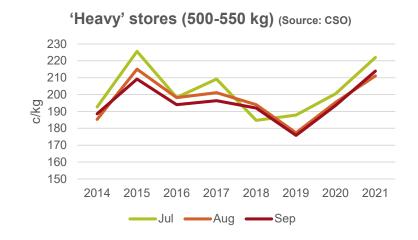
Performance efficiency

Beef price



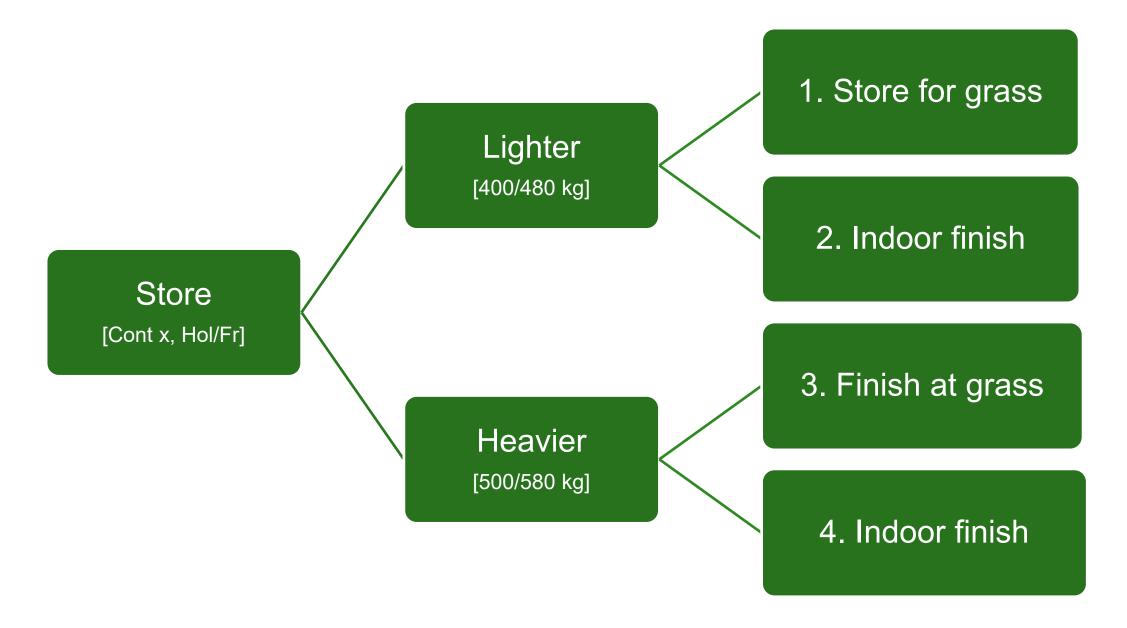
Store cattle price

Input prices





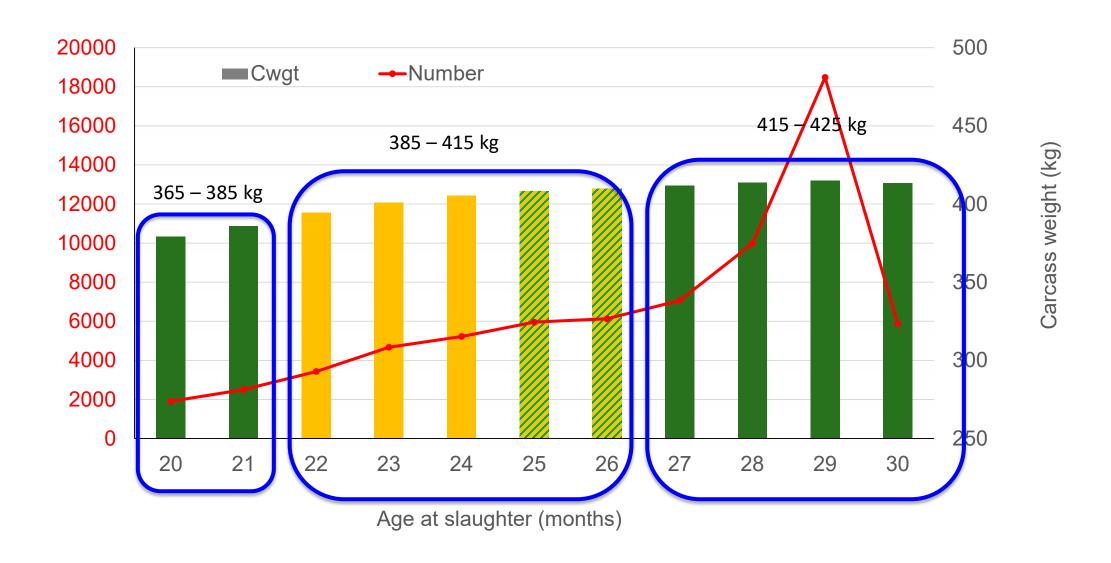
Finishing options for autumn purchased stores



Assumptions

- > Animal performance based on national slaughter statistics and Grange research data
- ➤ Store prices from 'Farmers Journal' MartBids
- ➤ Concentrate price €440/t as fed
- ➤ Grass silage price €50/t as fed; two cut harvest schedule. Costs include land, fertilizer, contractor, facility costs, feeding costs, etc.
- ➤ Grass costs €70/t DM; Costs include land, fertilizer, grassland, facility costs, etc.
- ➤ Mortality 2% (less carcass sold)
- > Other costs: haulage, factory fees, working capital interest, fixed/overhead costs

National slaughter profile, suckler steers



Continental x finishing systems

- 'Lighter' store, back to grass
- > Purchased store at 480 kg @ €2.55/kg
- ➤ Short grazing period (45 days) prior to housing
- > Stored for winter (120 d), grass silage + ~1.5 kg meal
- > To pasture for third grazing season (120 d)
- > Finished in ~Jun with no meal
- > Target slaughter weight 710 kg

'Lighter' store, indoor finished



- > Purchased store at 480 kg @ €2.55/kg
- Short grazing period (45 days) prior to housing (180 d)
- > Finished on grass silage + meal diet (5 kg/d)
- Target slaughter weight 680 kg

'Heavier' store, grass finished



- > Purchased store at 580 kg @ €2.70/kg
- days)*
- > Supplemented at pasture
- ➤ Target slaughter weight 640 kg

'Heavier' store, indoor finished



> Purchased store at 380 kg @ €3.10/kg

Weanling to U16

bull beef

- ➤ Short grazing period (45 days) prior to housing
- > Finished on grass silage + meal diet (180
- > Target slaughter weight 660 kg

- ➤ Short grazing period (60
- (5 kg/d)

- > Purchased store at 580 kg @ €2.70/kg
- > Short grazing period (45 days) prior to housing (90 d)
- > Finished on grass silage + meal diet (6 kg/d)
- > Target slaughter weight 700 kg

Economics of finishing Continental x stores

€/head (unless stated)	1. Lighter store,	2. Lighter	3. Heavier store	, 4. Heavier	5. Weanling bull
	grass	store, indoor	grass	store, indoor	to U16 mo
Purchase price	1224	1224	1566	1566	1178
Meals fed (kg/head)	212	953	318	529	1100
Meal cost (€440/t)	94	421	140	234	486
Forage costs	347	263	25	167	231
Total costs	1953	2194	1944	2221	2161
Carcass weight (kg)	395	385	350*	395	385
Cost of production (€/kg)	5.04 (Jun)	5.82 (Apr)	5.67 (Nov)	5.74 (Feb)	5.73 (Jun)
Impact on COP of +/-€50/head store	0.13	0.13	0.14	0.13	0.13
Impact on COP of +/-€50/t meal	0.03	0.12	0.05	0.07	0.14
Price required over COP for each €100/head margin (c/kg)	0.25	0.26	0.29	0.25	0.26

Economics of finishing Continental x stores

€/head (unless stated)	1. Lighter store, grass	2. Lighter store, indoor	3. Heavier store grass	, 4. Heavier store, indoor	5. Weanling bull to U16 mo
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Sensitivity - Prices

€/head (unless stated)	Lower	4. Heavier store, indoor	Upper
Purchase price	€1450 @ €2.50/kg	1566	€1682 @ €2.90/kg
Meals fed (kg/head)	529	529	529
Meal cost	€212 @ €420/t	234	€243 @ €460/t
Forage costs	167	167	167
Total costs	2076	2221	2353
Carcass weight (kg)	395	395	395
Cost of production(€/kg)	5.36	5.74	6.08
Price required over COP for each €100/head margin (c/kg)	0.25	0.25	0.25

Sensitivity - Performance

€/head (unless stated)	Lower	4. Heavier store, indoor	Upper	
Purchase price	1566	1566	1566	
Meals fed (kg/head)	529	529	529	
Meal cost	234	234	234	
Forage costs	167	167	167	
Total costs	2221	2221	2221	
Carcass weight (kg)	380	395	410*	
Cost of production(€/kg)	5.97	5.74	5.52	
Price required over COP for each €100/head margin (c/kg)	0.26	0.25	0.24	

National slaughter profile, Fr steers



Holstein/Friesian steer finishing systems

- 'Lighter' store, back to grass

 - Purchased store at 400 kg@ €2.15/kg
- Short grazing period (45 days) prior to housing
- ➤ Stored for winter (120 d), grass silage + ~1.5 kg meal
- ➤ To pasture for third grazing season (120 d)
- ➤ Finished in ~Jun with no supplementation
- ➤ Target slaughter weight 630 kg

Lighter' store, indoor finished



- Purchased store at 400 kg@ €2.15/kg
- Short grazing period (45 days) prior to housing (180 d)
- Finished on grass silage + concentrate diet (6 kg/d)
- ➤ Target slaughter weight 600 kg

(3) 'Heavier' store, grass finished



- Purchased store at 500 kg@ €2.20/kg
- Short grazing period (60 days)
- Supplemented at pasture (5 kg/d)
- ➤ Target slaughter weight 565 kg

4. 'Heavier' store, indoor finished



- ➤ Purchased store at 500 kg @ €2.20/kg
- ➤ Short grazing period (45 days) prior to housing (90 d)
- Finished on grass silage + concentrate diet
- ➤ Target slaughter weight 620 kg

Economics of finishing Holstein/Friesian stores

€/head (unless stated)	1. Lighter store, grass	2. Lighter store, indoor	3. Heavier store, grass	4. Heavier store, indoor
Purchase price	860	860	1100	1100
Meals fed (kg/head)	212	1059	318	529
Meal cost (€440/t)	94	468	140	234
Forage costs	396	309	29	210
Total costs	1622	1910	1459	1777
Carcass weight (kg)	320	310	285	320
Costs of production(€/kg)	5.17 (Jun)	6.29 (Apr)	5.22 (Nov)	5.67 (Feb)
Change in COP for +/-€50/head store	0.16	0.16	0.18	0.16
Change in COP for +/-€50/t meal	0.03	0.17	0.06	0.08
Price required over COP for each €100/head margin (c/kg)	0.31	0.32	0.35	0.31

Summary

- ➤ Given current input and store cattle prices, costs of production for 'winter' finishing ranges from €5.78/kg carcass (Cont x) to €5.98/kg carcass (Hol/Fr).
- > Systems are highly sensitive to input costs, particularly store and meal prices.
- > High performance (live weight gain) essential to manage costs per kg beef carcass
- Finishing at pasture reduces cost considerably, particularly for 'lighter' stores (20% compared to indoor finishing).
- > However, requires longer duration on farm with implications for other farm systems.