
Beef EBI economic weights

Changes – August 2008



Input price changes

Price	Previous	Updated (May 2008)
Labour (€/ hour)	€15	€17
Suckler heifer replacement	€355	€374
Cost of barren suckler cow	€302	€318
Concentrate cost (€/ tonne)	€200	€300
Average weanling price (€/ kg LW)	€1.50	€1.80
Carcase price (€/ kg CW)	€3.00	€3.20
Milk price (€/ litre)	€0.17	€0.30
Average feed price (€/ kg DM)	€0.074	€0.126

Calving difficulty

- Dairy calving difficulty from -€3.73 to -€4.35
- Beef calving from -€2.31 to -€2.46
- Maternal calving from -€1.69 to -€1.81
- The result of:
 - Increased labour costs
 - Cost of dead cow (via ↑ replacement costs)
 - Increase in milk price



Gestation length

- From -€1.58 to -€2.36 (beef)
- The result of:
 - Increased weanling value



Dry matter intake

- From €0.06 to €0.10
- The result of:
 - Increased costs of concentrate, silage, and grass
 - Changes in the proportion of animals by finishing system
 - Teagasc data

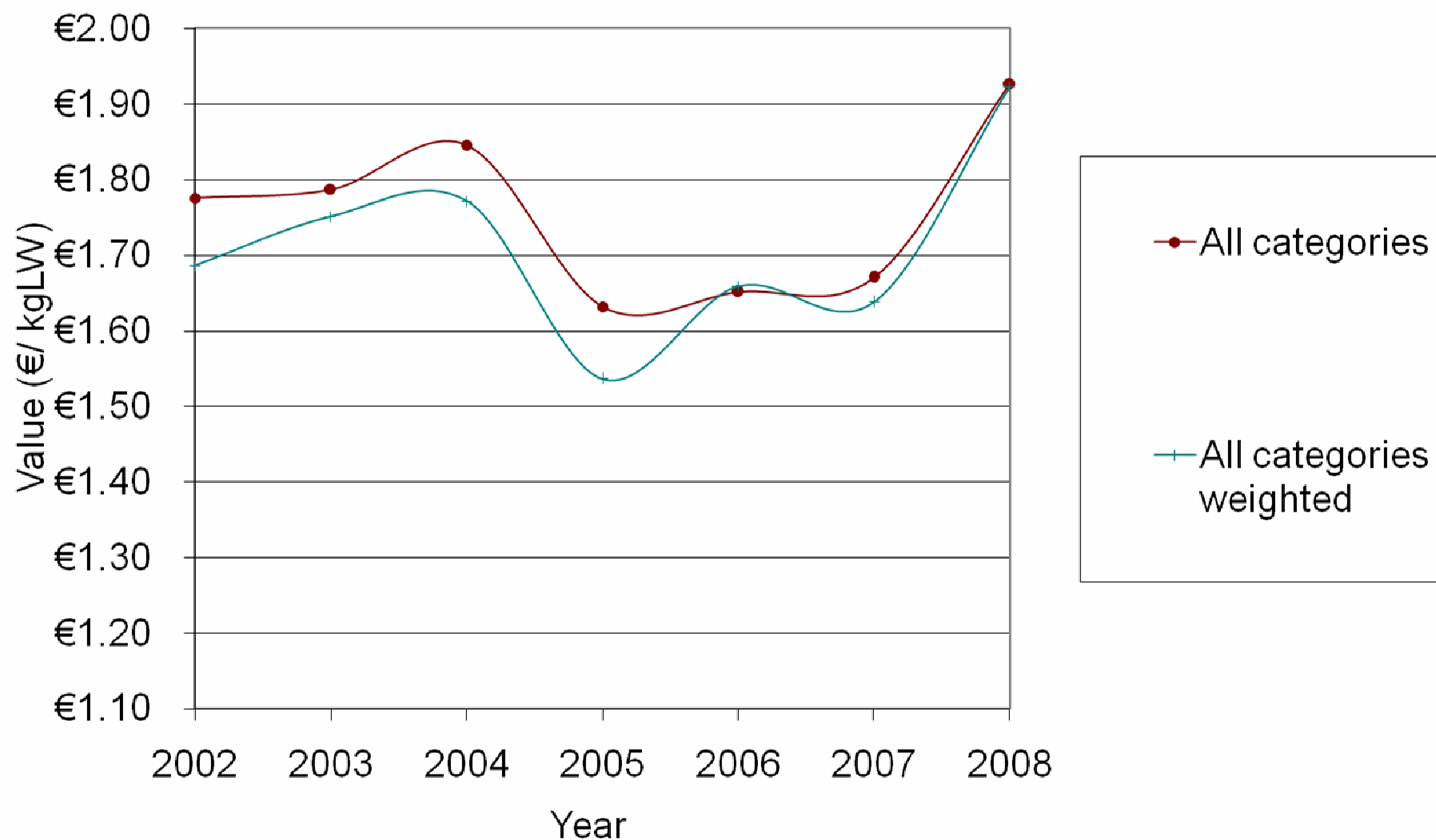


Weaning weight direct

- From €1.29 to €1.55
 - Analysis of mart data
 - Average price increase



Average weanling mart price by calendar year (excluding female dairy)



Calf mortality

- From -€5.22 to -€5.34
- The result of:
 - Labour cost increase



Carcass weight

- From €2.34 to €2.50
 - Increase in price for prime carcass



Cow mature weight

- From -€0.51 to -€1.22 (heifer feed)
- From -€0.18 to -€0.41 (cow feed)
- Carcass price €2.80
- The result of:
 - Increase feed costs
 - Dietary make up by season (Teagasc data)



Calving interval

- From -€1.15 to -€1.37
- Analysis of mart data
- The result of:
 - Increased weanling value

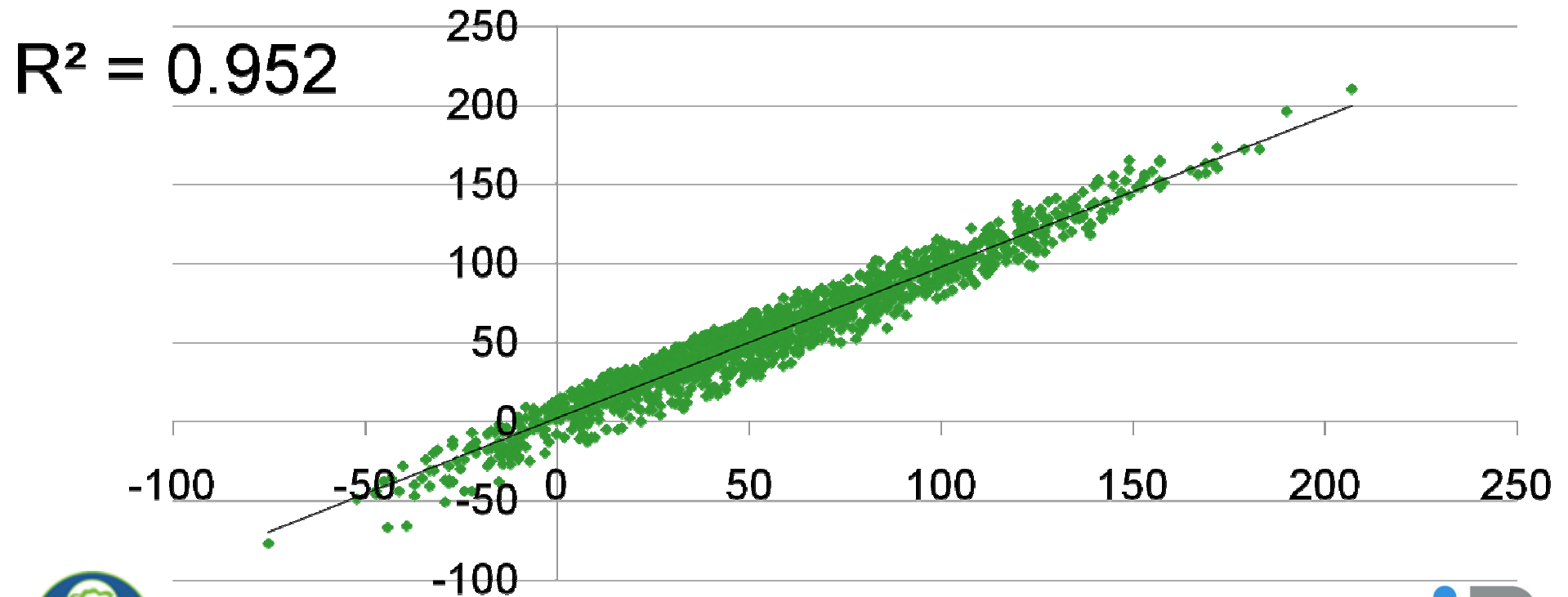


Survival

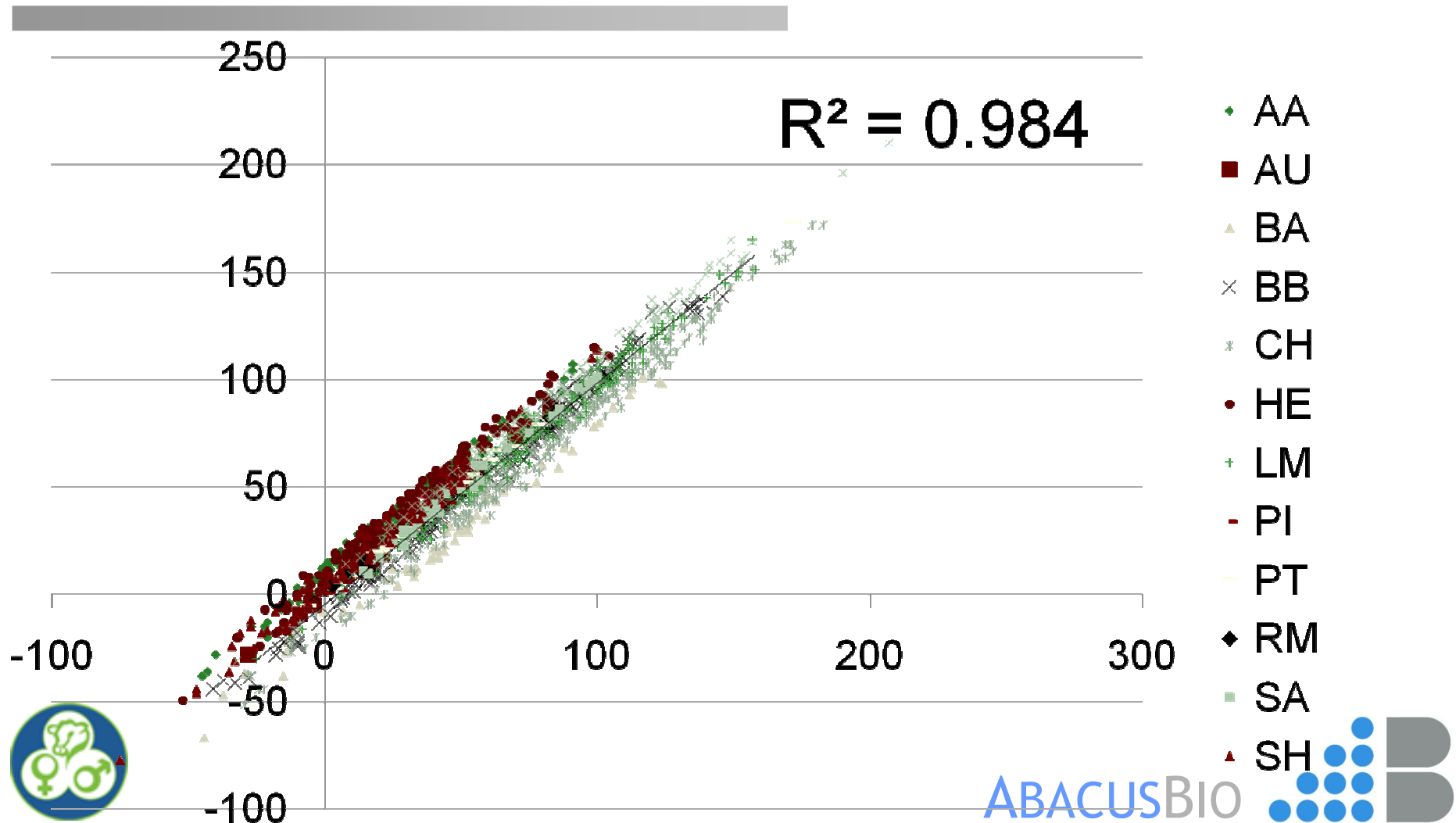
- From -€3.02 to -€3.17
 - Replacement heifer cost



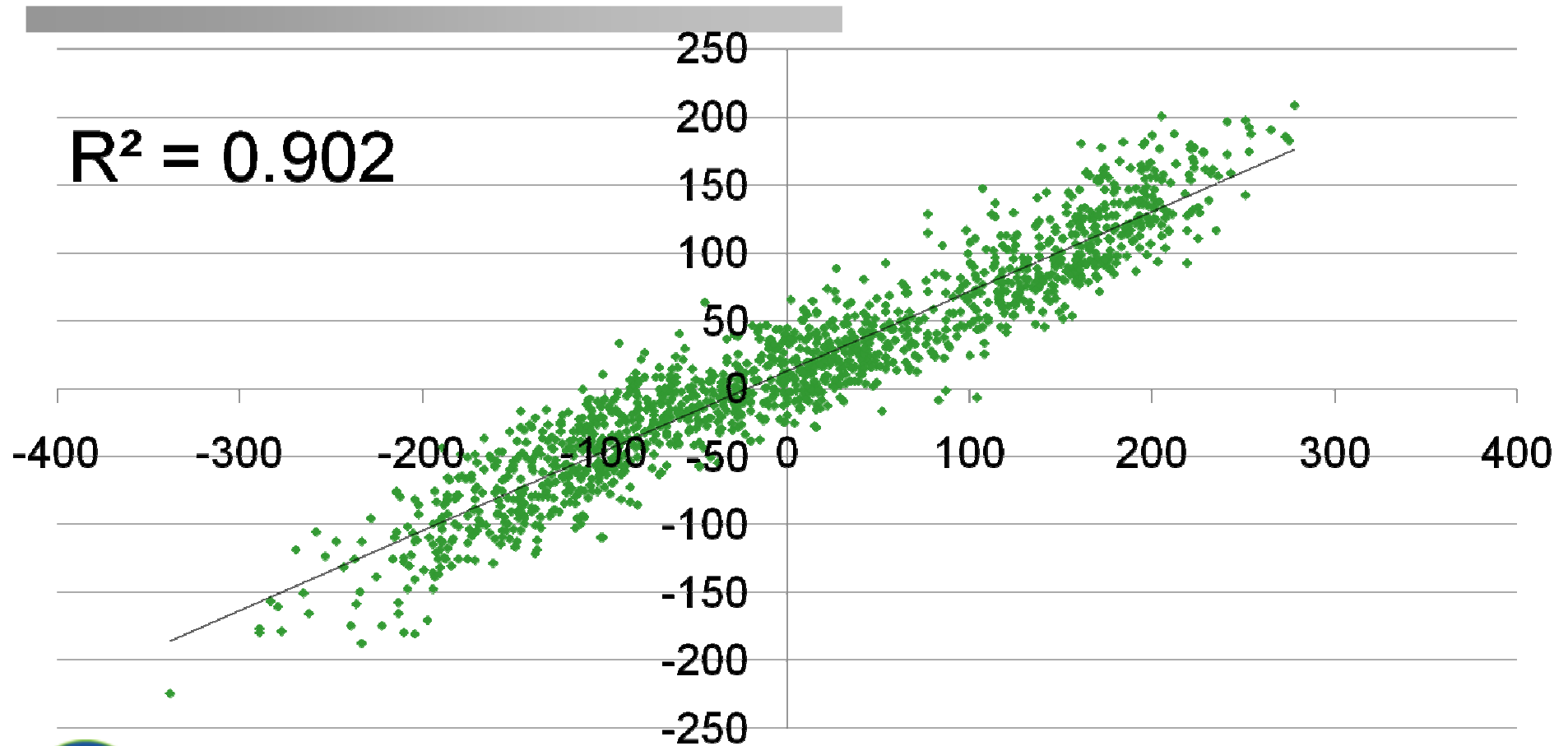
SBV Old vs SBV New EVs



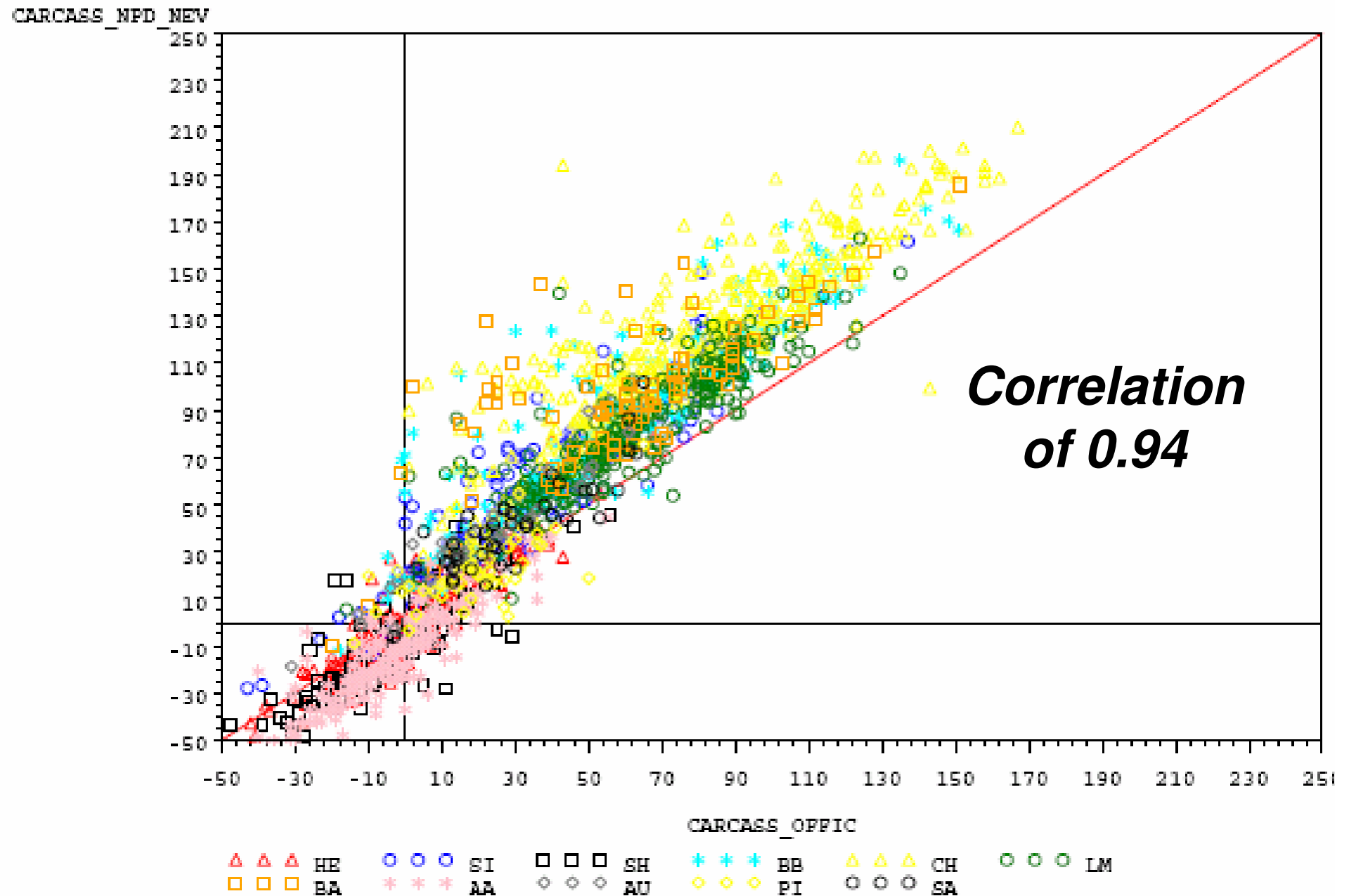
SBV old vs new by breed



Milk and fertility (Old vs New EVs)



Alsires Carcass Index : old v v new with new Economic values



New Docility trait

Additions – August 2008



Docility

- Based on:
 - Increased labour costs
 - Injury or death of farmer



Labour cost

- One problem suckler cow increases labour requirements by 5 hours per year
- One problem weaned calf to slaughter or replacement heifer until first calving increases labour requirements by 3 hours per year
- €17/ hour



Rate of injury

- Teagasc survey data
- 612 non-fatal injuries caused by attacks on beef farms
- Includes bulls, weanlings, and cows



Cost of injury - labour

- Teagasc data

Work days lost	Percent of accidents
None	18.7%
1-9	19.6%
10-19	22.2%
20-99	7.6%
100 +	31.9%

- Weighted average 40.5 days
- 8 hour day at cost of €17/ hour
- €5508/ injury in labour costs



Cost of injury - treatment

Treatment	Percent of accidents
1 st Aid	18.7%
Doctor	24.8%
Hospital	56.5%

- Assumptions:
 - 1st aid costs €50
 - Doctor treatment and follow up would cost €500
 - Hospital treatment could vary greatly but assume on average €2000



Cost of injury - treatment

- Weighted average €1263/ injury in treatment

Cost of injury

- Time off work and treatment €6771



Rate of death

- 27 fatalities between 1996 and 2007 (HSA)
- 85% the result of attack (bull, cow, weanling)
- 1.92 deaths per year



Cost of death

- Estimated cost of farm fatality ~€2.2 million (Queen's University Belfast)

Cost of injury and death

- Weighted average cost of injury or death €13630

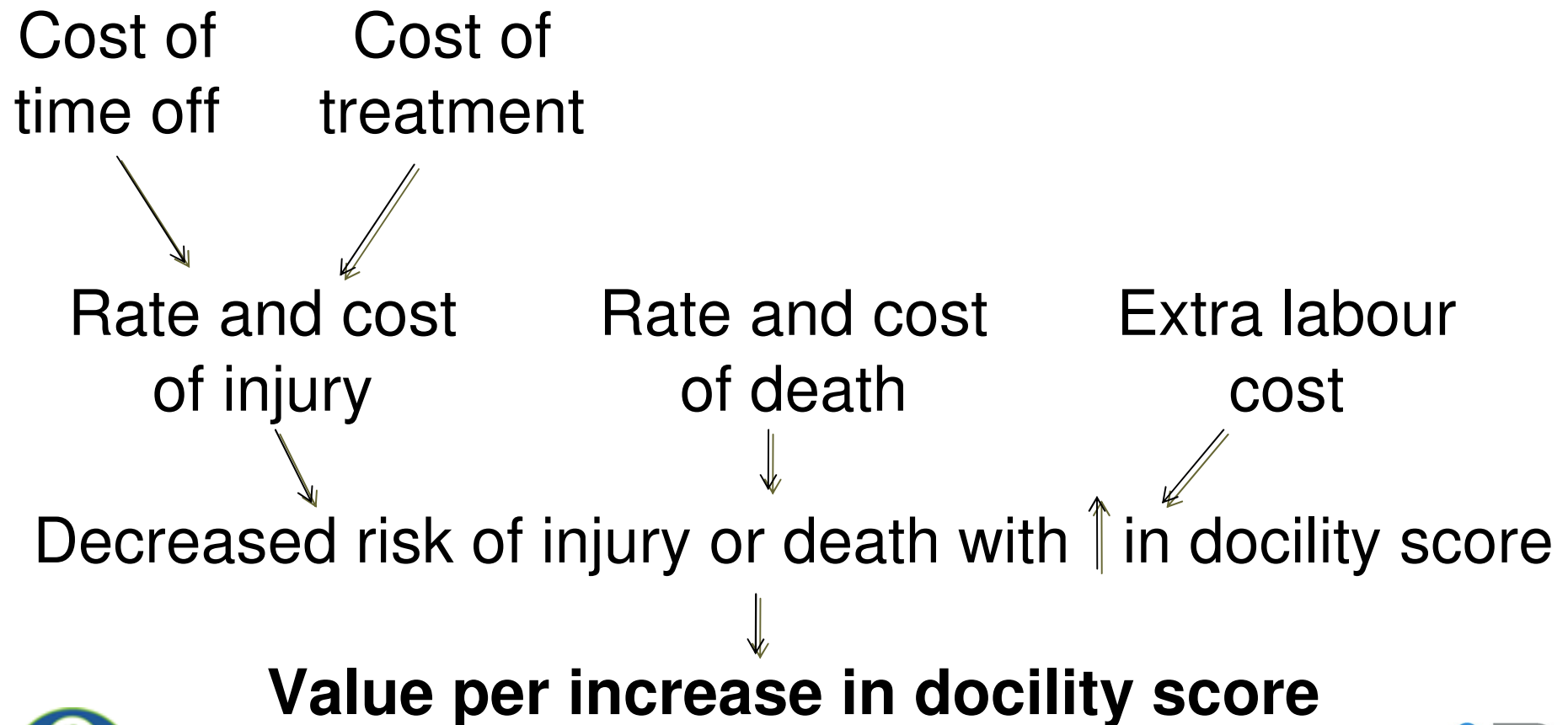


Assumptions

- There is decrease in risk of “problem” animals by 15% for a 1 unit increase in average docility score for a group of animals
- One problem animal increases the likelihood of injury or death by 0.01 (1%) for suckler cows
- One problem animal increases the likelihood of injury or death by 0.005 (0.5%) for weanlings



Putting it together



Summary

- Injury/death/ labour costs
- Weanling and cow docility accounted for
- Suckler cow = €33.20/ 1 docility score
- Weanling to replacement or slaughter = €17.87/ 1 docility score



Application to the index

- Added to
SBV = €52
per 1 unit
increase in
docility
score

Breed	New doc	Docility Profit
AA	99.4	-€1.20
AU	100.3	€0.90
BA	95.8	-€8.30
BB	119.4	€38.10
CH	106.5	€12.90
HE	112.6	€24.90
LM	92.3	-€15.00
PI	93.0	-€14.40
SA	96.8	-€6.10
SH	112.0	€23.70
SI	101.4	€2.80
Grand	100.5	€1.00



Points/ Discussion

- A lot of variation in docility within the breeds that record it
- How to present the information



New Trait - Polledness

- Two approaches to cost disbudding:
 - Cost of farm relief
 - Cost of having equipment to carry out the job
- Assumptions about farm size and use of relief or own equipment



Potential costs of disbudding

- Check in growth performance
- Calf death
- Cost of anaesthetic
- Time costs associated with the job
- Depreciation costs of disbudders and calf crate
- Cost of farm relief



Costs to disbud

- €2.34/ calf anaesthetic (€38/ 12 dose bottle)
- €2.83/ calf time cost (10 mins per calf)
- Total yearly depreciation cost of €34.50 (disbudders and crate)
 - Cost per calf dependent on number of calves disbudded per year
- €6/ calf (call out and equipment) for farm relief



Putting it together

Cost of
anaesthetic Cost of
labour

+

Cost of farm
relief

~60%
farmers
using relief

Cost of
anaesthetic Cost of
labour

+

Depreciation cost
on equipment

~40%
farmers own
equipment

€7.86

Value for polledness



Genetics of polled

- Absence of horns is controlled by single major gene – Polled (P) gene
- Dominant to (p)
- 3 genotypes
 - PP Pp pp
- Low levels in breeds in Ireland with exception of Angus but worthwhile having incentive to reflect this



Implementation

- Decide how docility incorporated in the index
- Polledness in the future

