Cost of Piglet Mortality

Cost of Mortality

- How do we see a dead Piglet.

Cost of Mortality

- Depends on the perspective
- Owner/Manager/Worker
- Do you think there is a difference?

- Owner / General Manager
  - Mortality is a cost of production
  - If your COP is $3.00 it already includes basic numbers in this e.g.
    - Pre wean – 12%
    - Post wean – 5%
    - However your farm is performing
  - So their perspective is really - COP as an indication

- Manager
  - Again it is a COP
  - But also it affects efficiencies
  - They are measured against it
  - but again it roles up into COP
  - So again can be hidden.

- Staff / Workers
  - Unlikely viewed as a COP
  - More likely viewed on a personal level
    - Sorrow
    - Disappointment
    - Frustration
    - Disenchantment
    - But most likely it is seen as a dead pig and it is thrown into the dead bucket.

Cost of Mortality

- So how should it be viewed
- Most likely all of the above.
- But there is an economic cost to mortality
- And we need to ensure all levels of the production cycle understands there is a cost associated with mortality.

And it is not just !

Economics of mortality

How it can be viewed

- Profit Factor – Opportunity loss
- Cost factor
- Efficiency Factor

Some assumptions

- Budget weaned – 1050 pigs
- Remember we want to optimise the capital investment at all times so need to maintain even and full production.
- 1050 x 12% mortality = 1176 born alive
- So 1% movement is 12 pigs variation
- Remember any calculation is a variation to Budget or current performance – i.e. COP

Opportunity Loss

- 1050 pigs weaned x 12% mortality = require 1176 born alive
- Average Profit per sow / or pig?
- $800 or (800/23) $34.70 per progeny pig
- So 1% mortality equates to 12 pigs less weaned /week
- So opportunity profit loss
- = 12 x $34.70 x 52
- = $21,651 / year

Looking at it as a Cost.?

- Budget weaned – 1050 pigs
- 1050 x 12% mortality = 1176 born alive
- So 1% mortality is 12 pigs less weaned
- Some assumptions
- Cost of wean pig - $72 / 23 weaned/ sow

Cost of wean pig

• COP = $3.00 for 78 kg pig =	$234/pig
• Growout cost – 1.30/week – 1.3 x 19 weeks =	$24.7
• Feed – 230kg x $500/tonne =	$115
• Vaccines Meds etc	$10
• Freight	$12
• Cost per weaner	$72.30
• Cost per sow	$1662.90

Looking at it as a Cost.?

- 12 x $72 = $864
- 864/1050 = 82 cents per pig sold or $0.01/kg
- But remember that is across every pig sold
- $0.82 x 2400 x 23 = $45,264

Other Values – improved Efficiencies

- In our example 1050 pigs weaned 12% pre-wean Mortality
- 1176 BA
- So a 1% improvement has other benefits outside opportunity profit or increased cost
- 11% mortality = only 1165 pigs need to be born to meet wean budget
- Means 12 pigs or 1 less sow required per week – 21 week Cycle = 21 sows less required in the herd.
- What is that worth.
- 21 x 1662 annual cost = $34,920 saving

Summary -

- Dead pigs have value
- Helps managers, staff and owners a way to do a cost benefit analysis
- Will the planned action be worth the effort. – cost benefit
- It is not just a pig thrown in the dead bucket and forgotten.

So what is PIC doing about this area.

Production Reality - US

Harsh reality or the inconvenient truth is a factor in many of our lives. In the swine industry we have the stories of productivity. Seems no one has less than 25 pigs per sow per year, but few show the results in any detail.

We thought it interesting to do some figuring:

- 2020 U.S. Hog Slaughter = 131.5 million.
- Pigs imported from Canada to the U.S.A.= 5.3 million.
- September 2019 U.S. Breeding Herd = 6.431 million.

Farmer Arithmetic:

- 131.5 million less 5.3 million = 126.2 million
- 126.2 million ÷ 6.431 million = U.S.A. **19.62** hogs per breeding animal in 2020.

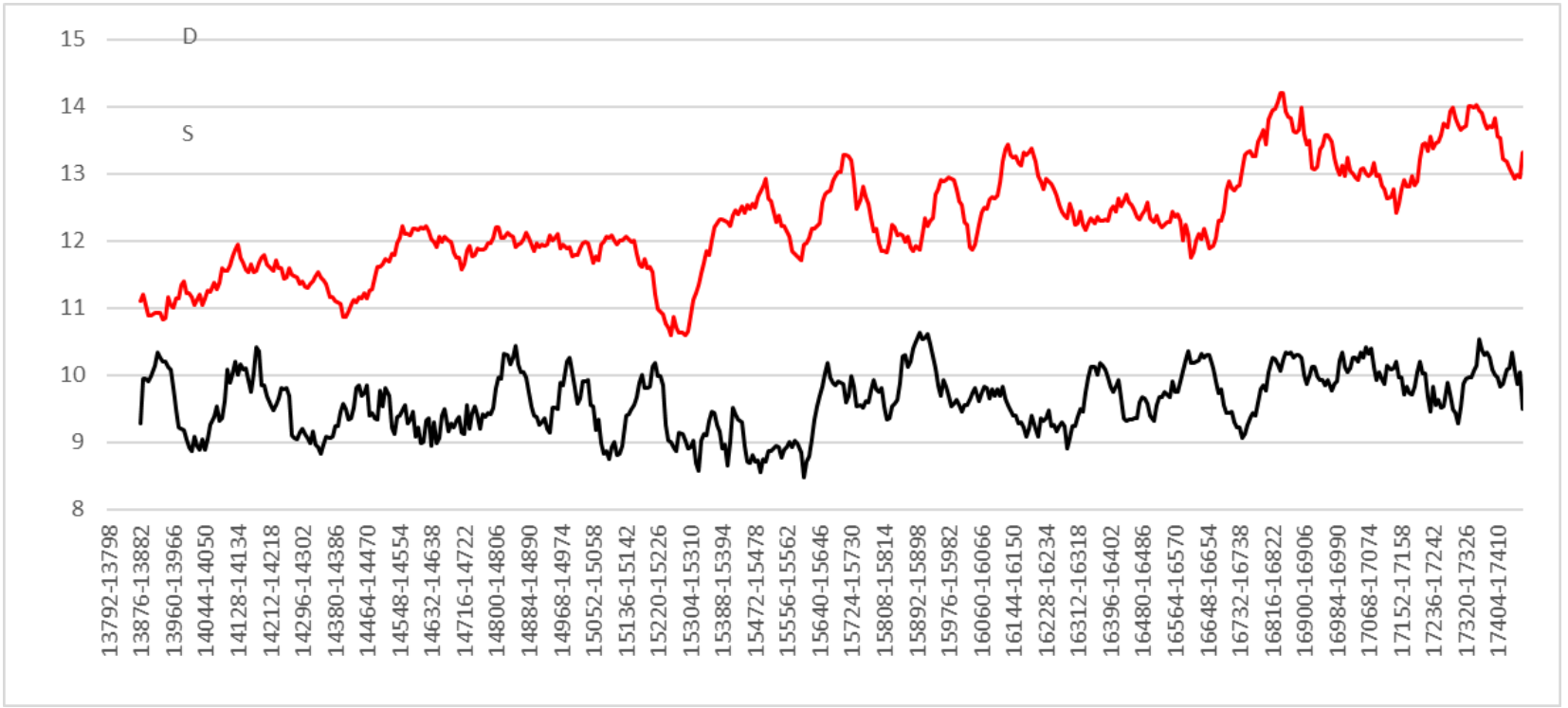
PIC®

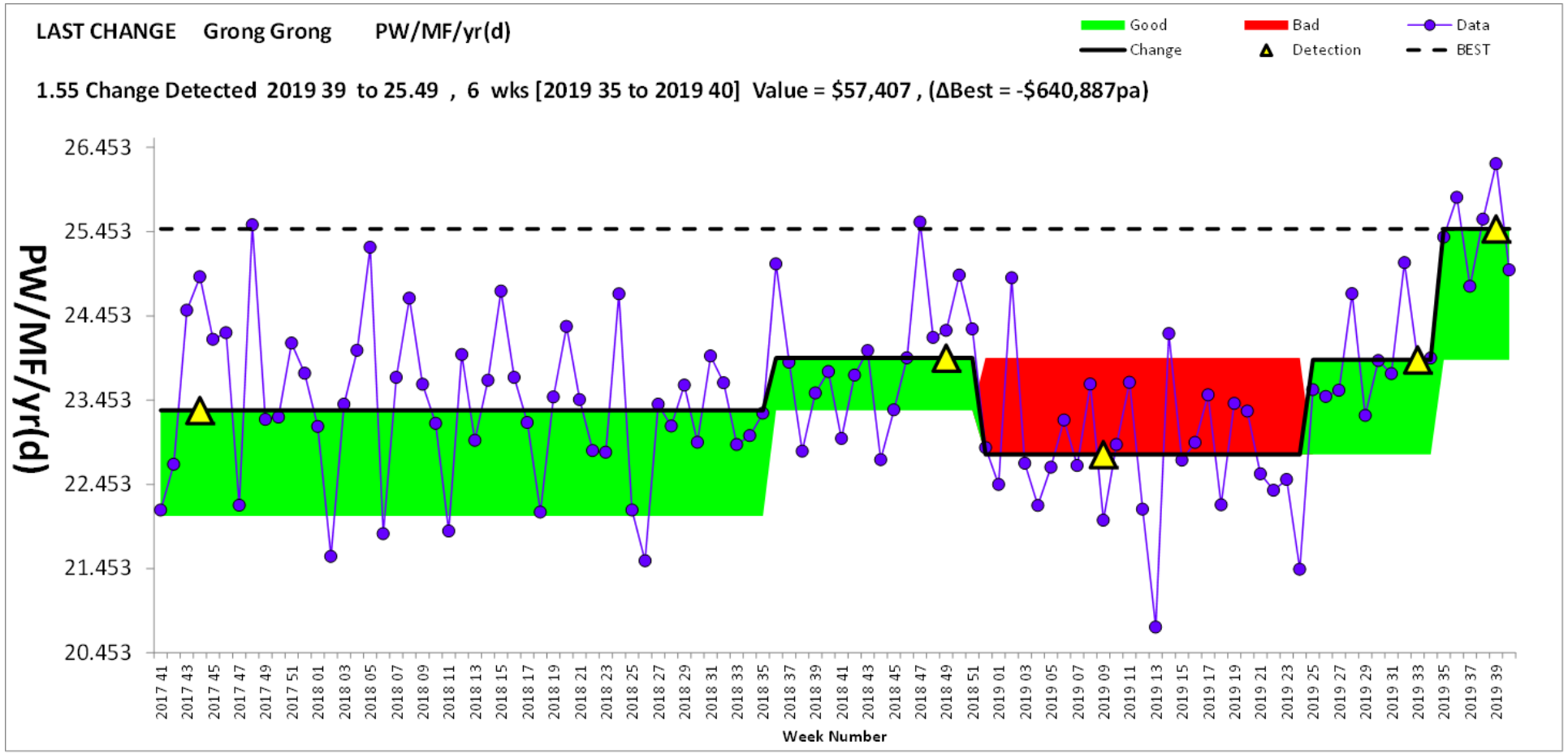
Production Reality - Aus

Total Slaughters – 5.5 mil
Total sows - 280,000
Sold/ sow - 19.6

Total bacon slaughters – 5.36
Sold/ sow - 19.14

We are improving year on year




LAST CHANGE Grong Grong PW/MF/yr(d)
Good
Bad
Data
Change
Detection
BEST
1.55 Change Detected 2019 39 to 25.49 , 6 wks [2019 35 to 2019 40] Value = $57,407 , (ΔBest = -$640,887pa)
26.453
25.453
24.453
23.453
22.453
21.453
20.453
PW/MF/yr(d)
2017 41
2017 43
2017 45
2017 47
2017 49
2017 51
2018 01
2018 03
2018 05
2018 07
2018 09
2018 11
2018 13
2018 15
2018 17
2018 19
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2019 13
2019 15
2019 17
2019 19
2019 21
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2019 25
2019 27
2019 29
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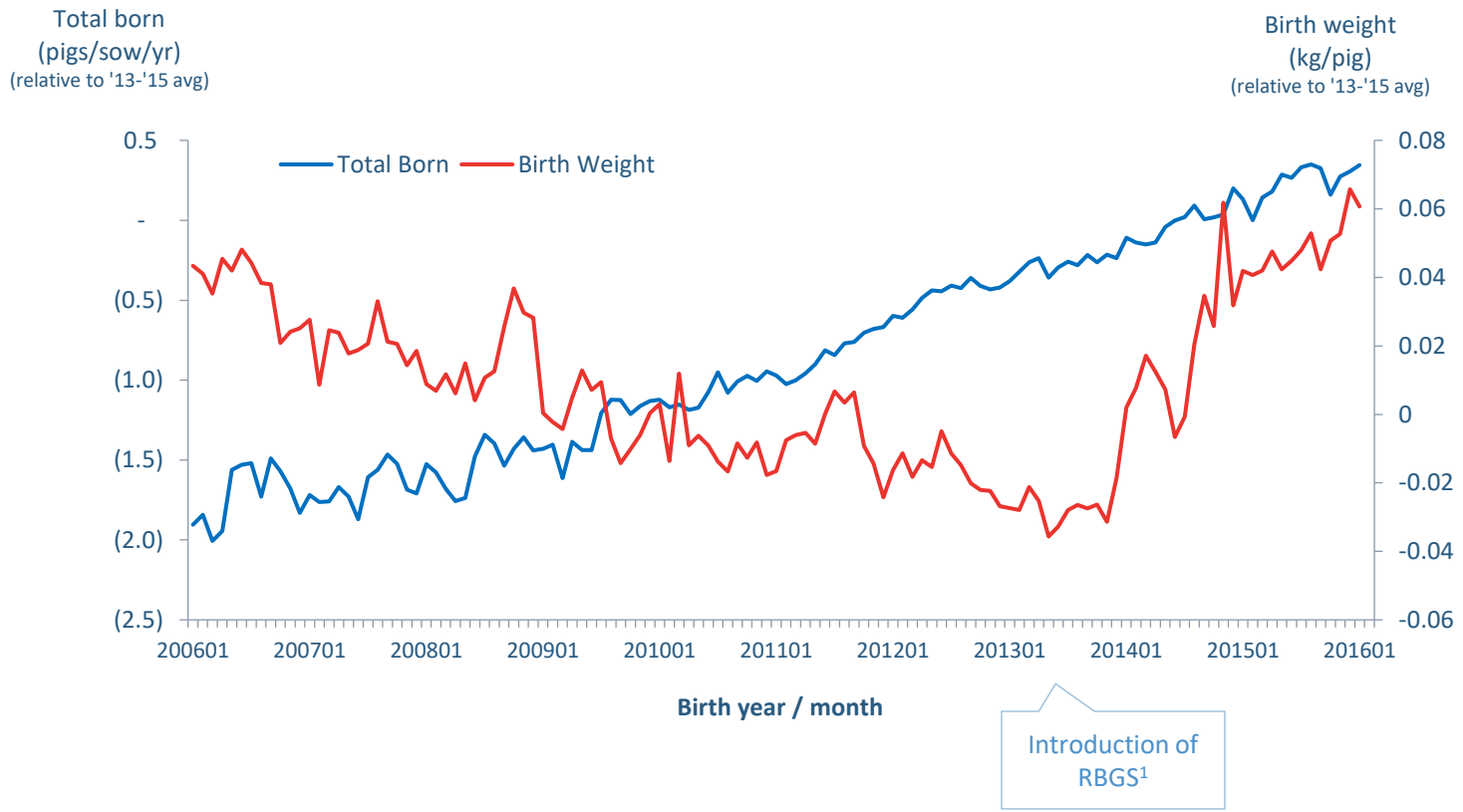
2019 35
2019 37
2019 39
Week Number

PIC improves total born & birth weight

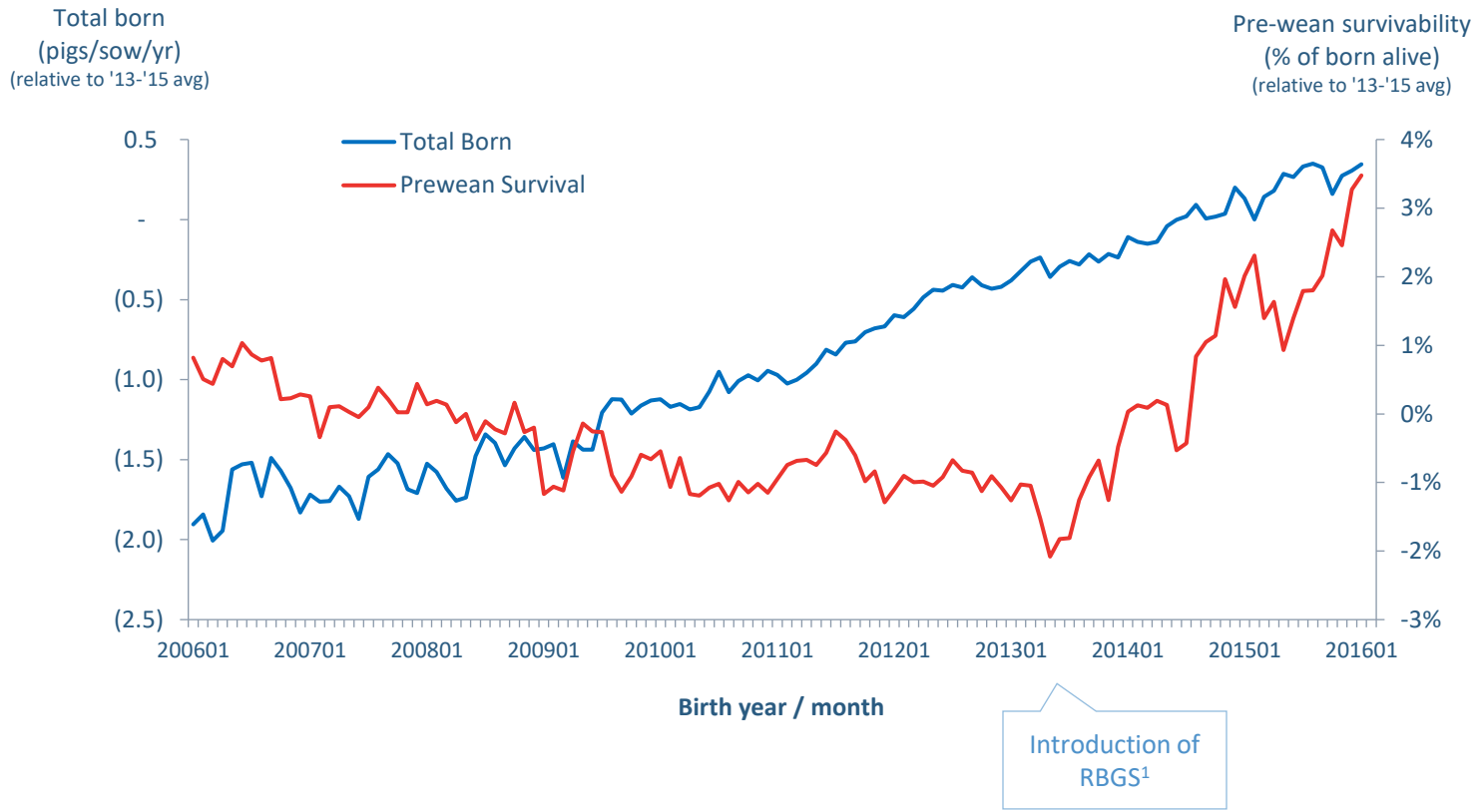
Trend: genetic improvement in birth weight and total born
(PIC Genetic Nucleus)



1. Relationship based genomic selection
Source: PIC L02, L03 pure lines (Camborough)

PIC improves total born & pre-wean survivability

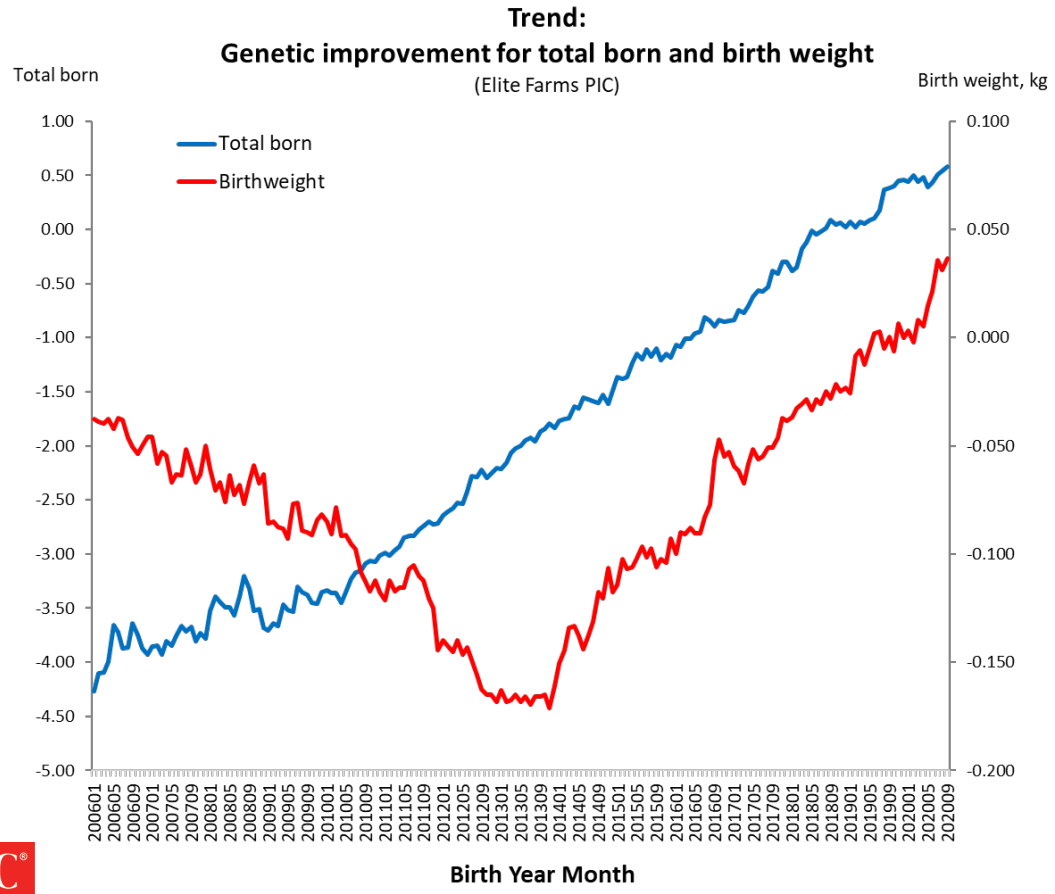
Trend: genetic improvement in pre-wean survivability and total born
(PIC Genetic Nucleus)

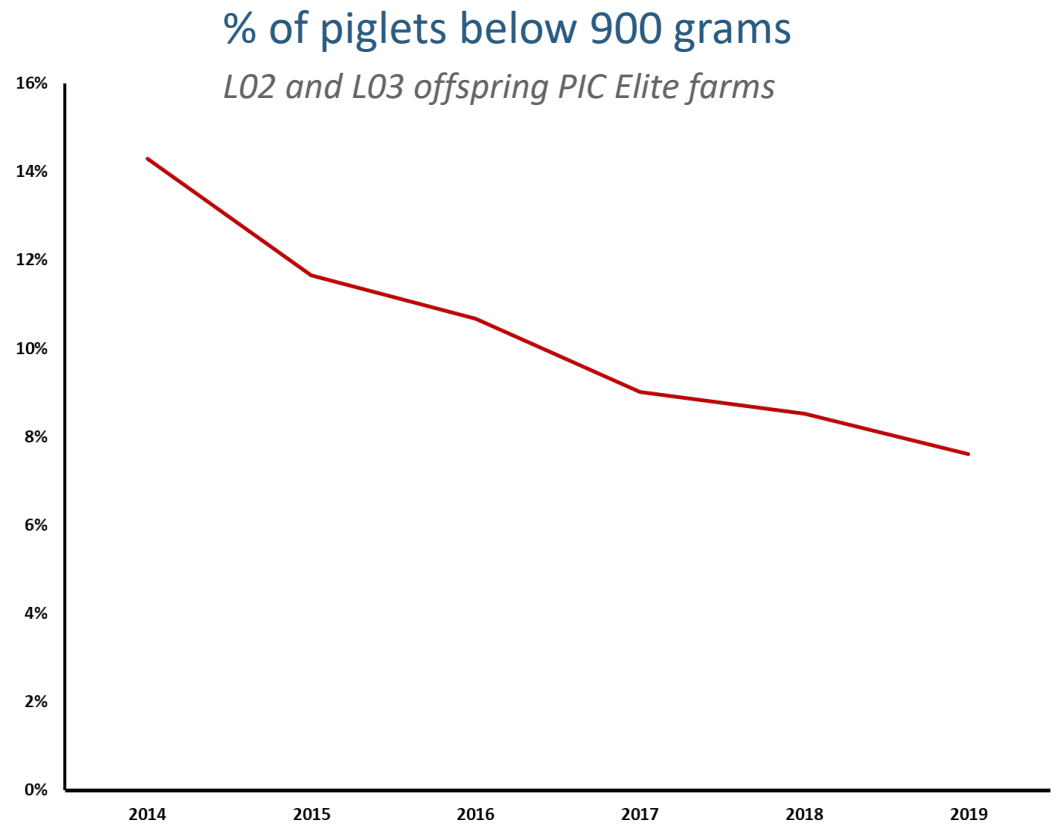


1. Relationship based genomic selection
Source: PIC L02, L03 pure lines (Camborough)

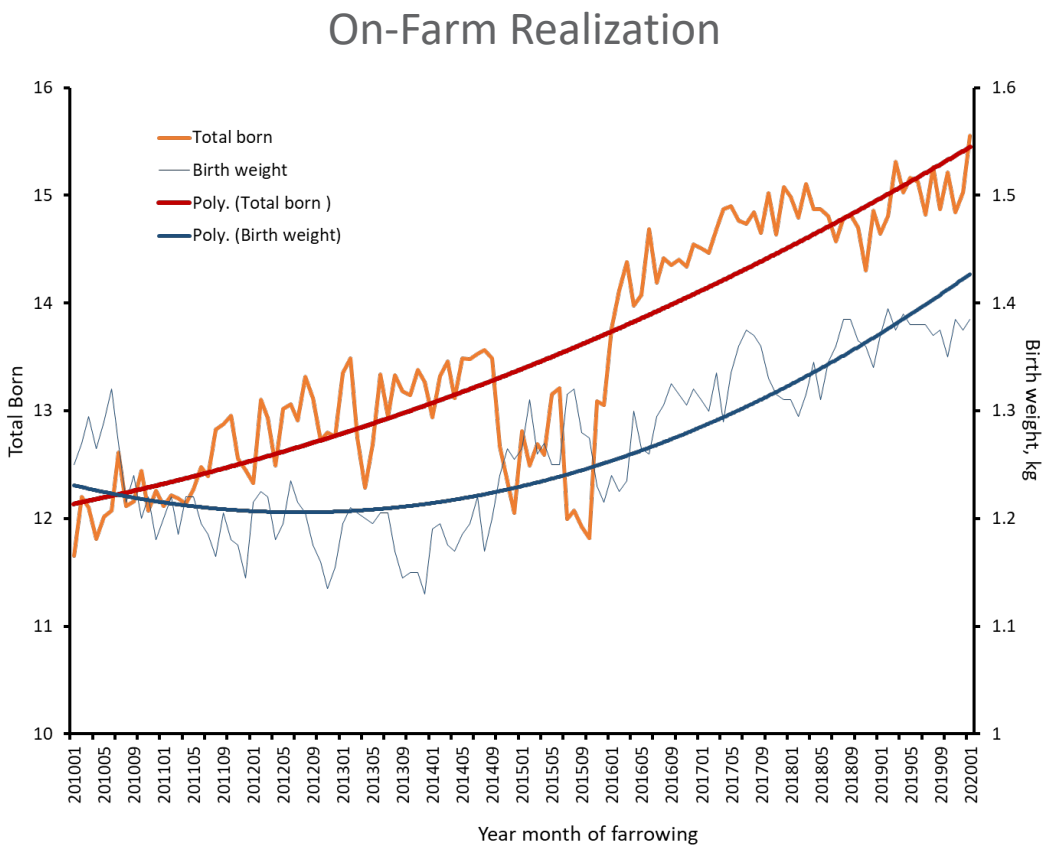
Focus on more and better pigs a key factor of gain

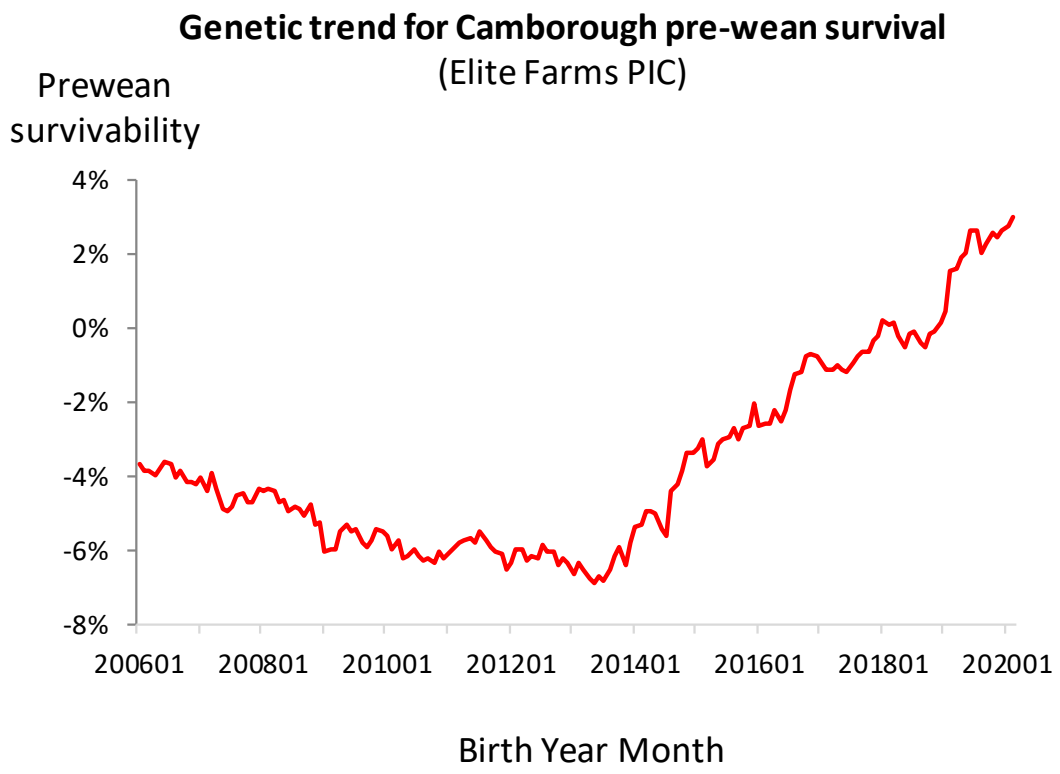
Genetic trend continues to predict strong improvements





Camborough mothering ability supports PSY





Average of Large White and Landrace pureline sows – more and bigger pigs
Heterosis of the F1 will increase total born expectation by 8-11%
Graphed values are the simple average of L02 and L03 with no heterosis adjustment