To submit a question

E-MAIL: **query@sheep.ie** or TEXT: **086 023 7658**
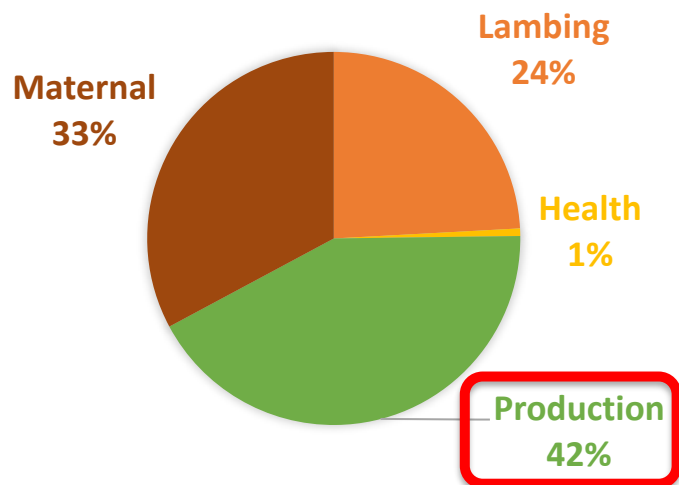
Sheep Ireland
www.sheep.ie

Using carcass data to predict Days to Slaughter more effectively

29th April 2021, Sheep Ireland Industry Meeting

Teagasc
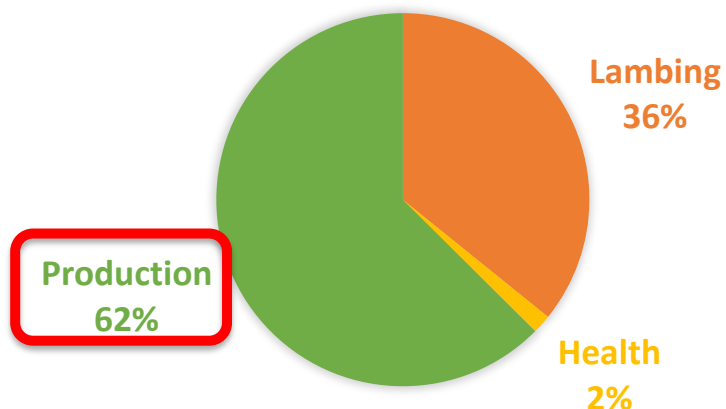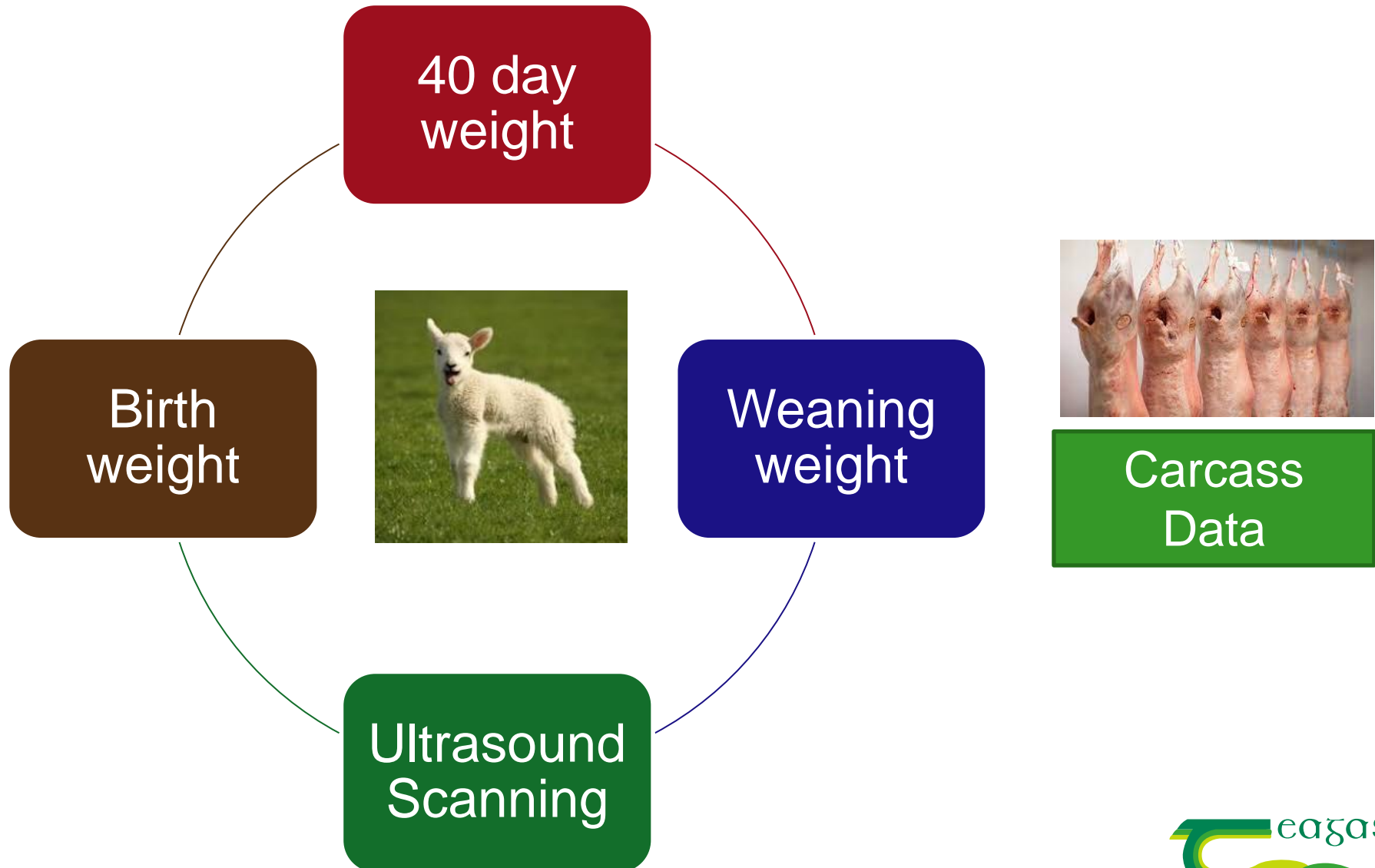AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

Smarter
SMAll RuminanTs breeding for Efficiency and Resilience

Importance of lamb performance

REPLACEMENT

Maternal 33%

Lambing 24%

Health 1%

Production 42%

TERMINAL

Lambing 36%

Production 62%

Health 2%

Days to slaughter
Carcass conformation
Carcass fat

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Importance of lamb performance

40 day weight

Birth weight

Weaning weight

Ultrasound Scanning

Carcass Data

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Objective

Update lamb performance module to include new carcass data

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Carcass Data

- 15,714 lambs slaughtered

- 38 commercial flocks

- 8 factories

Carcass Information:

%	E	U	R	O	P
1	0	0	0.03	0.01	0.05
2	0.03	14.64	32.58	0.31	0.01
3	0.10	20.83	28.66	0.46	0.01
4	0	0.66	1.53	0.01	0
5	0	0	0.08	0	0

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Carcass Data - genetics

1. Are the traits under genetic control?

Trait	Range	Average	Heritability
Carcass weight	15 to 26 kg	20.54 kg	0.14
Carcass conformation	E, U, R, O, P	R	0.19
Carcass fat	1 - 5	2.55	0.09
Days to slaughter	95 to 365	201.62	0.16
Kill out	25 to 55%	45.37%	0.22

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Carcass Data - genetics

2. What's the relationship between carcass and lamb performance traits?

Legend: Carcass weight, Carcass conformation, Carcass fat, Days to slaughter

Correlations:
- Scan muscle & carcass conformation **0.70**
- Scan fat & carcass fat **0.86**

(Chart axis: Positive / Negative; Strong, Moderate, Weak, Moderate, Strong; categories: Birth, 40 day, Weaning, Scanning)
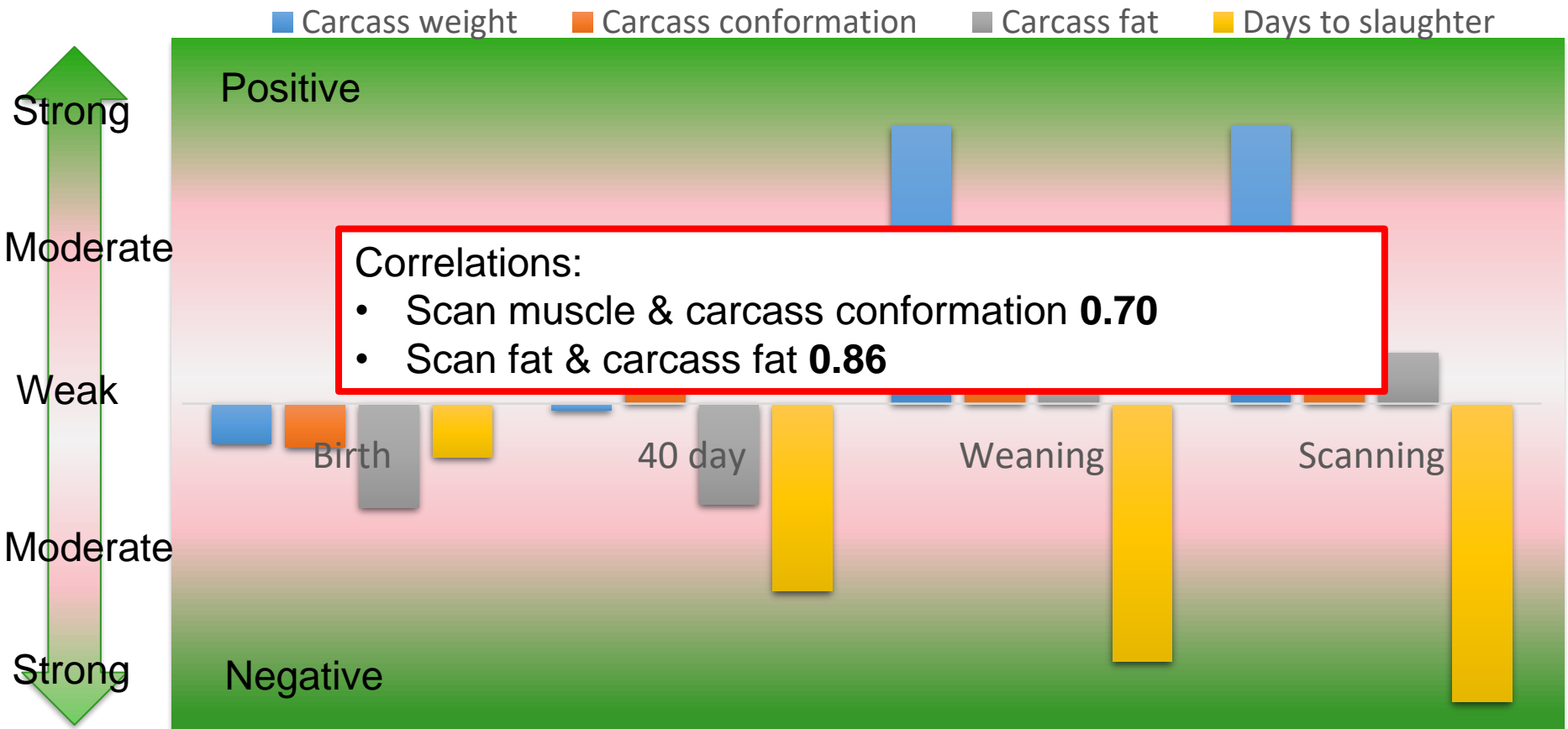
Impact on the indexes

TERMINAL STARS - Active rams
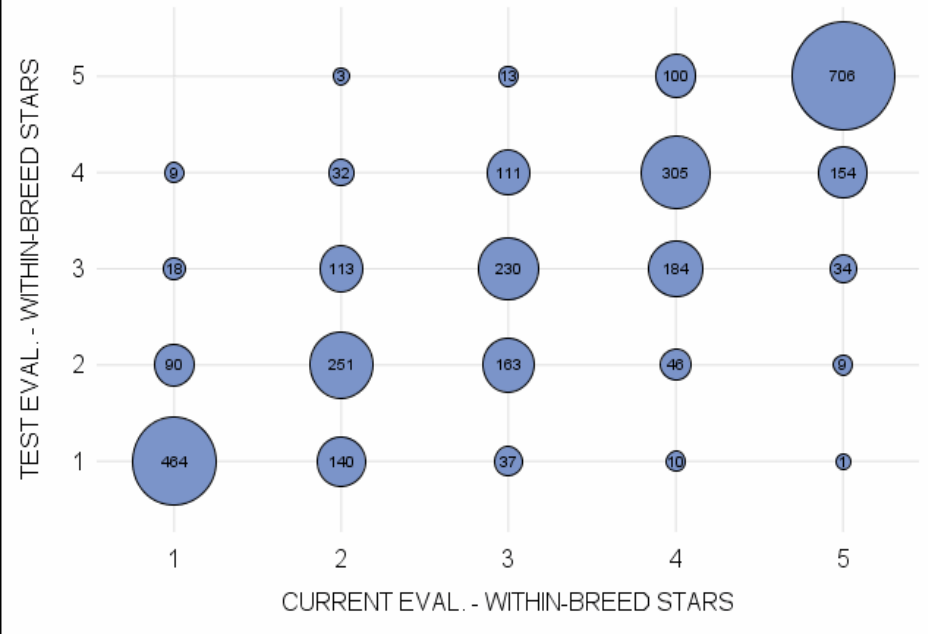Star equal or gain: 2445 — Star loss: 778

REPLACEMENT STARS - Active rams
Star equal or gain: 2384 — Star loss: 839
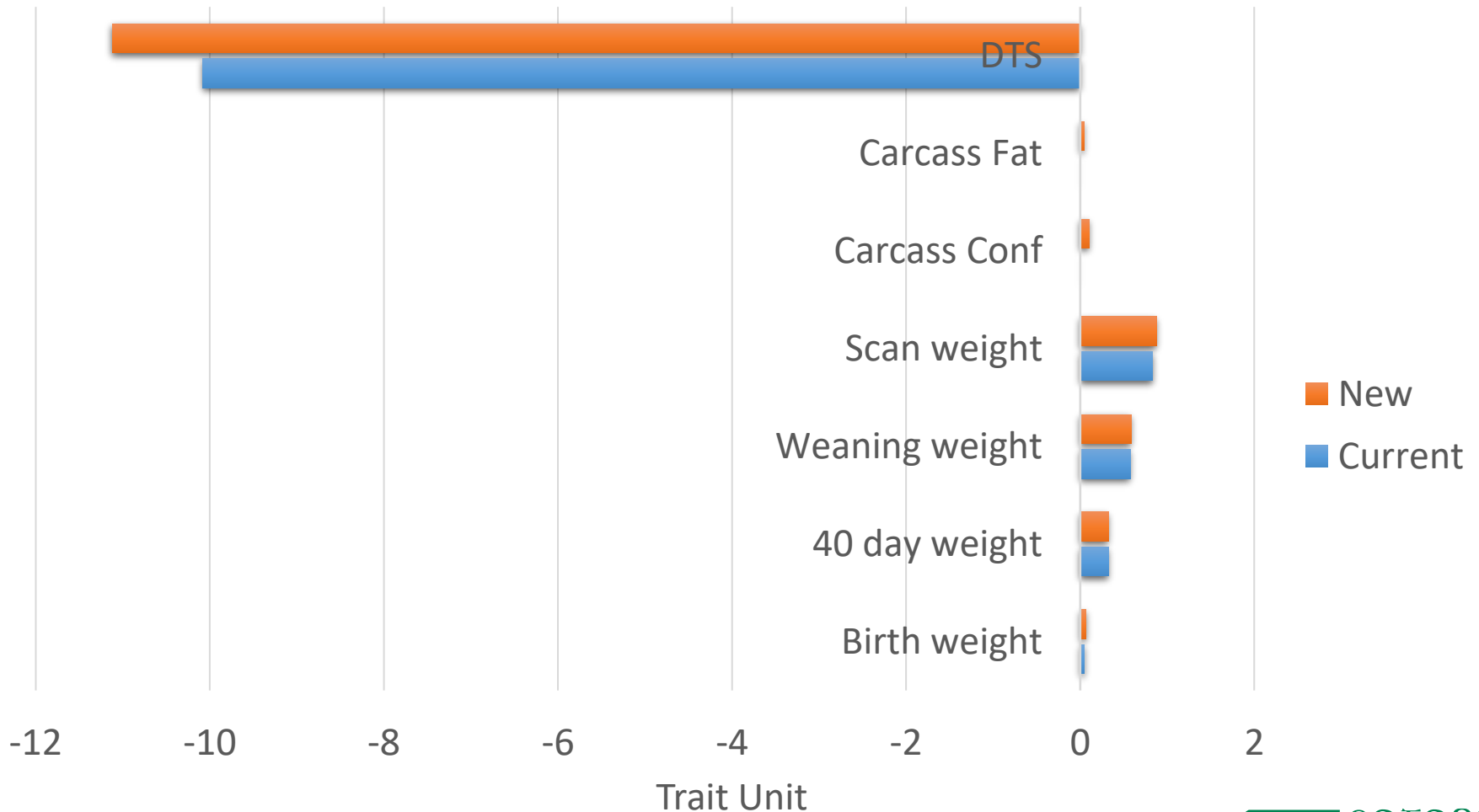
Impact on Indexes
Terminal Index
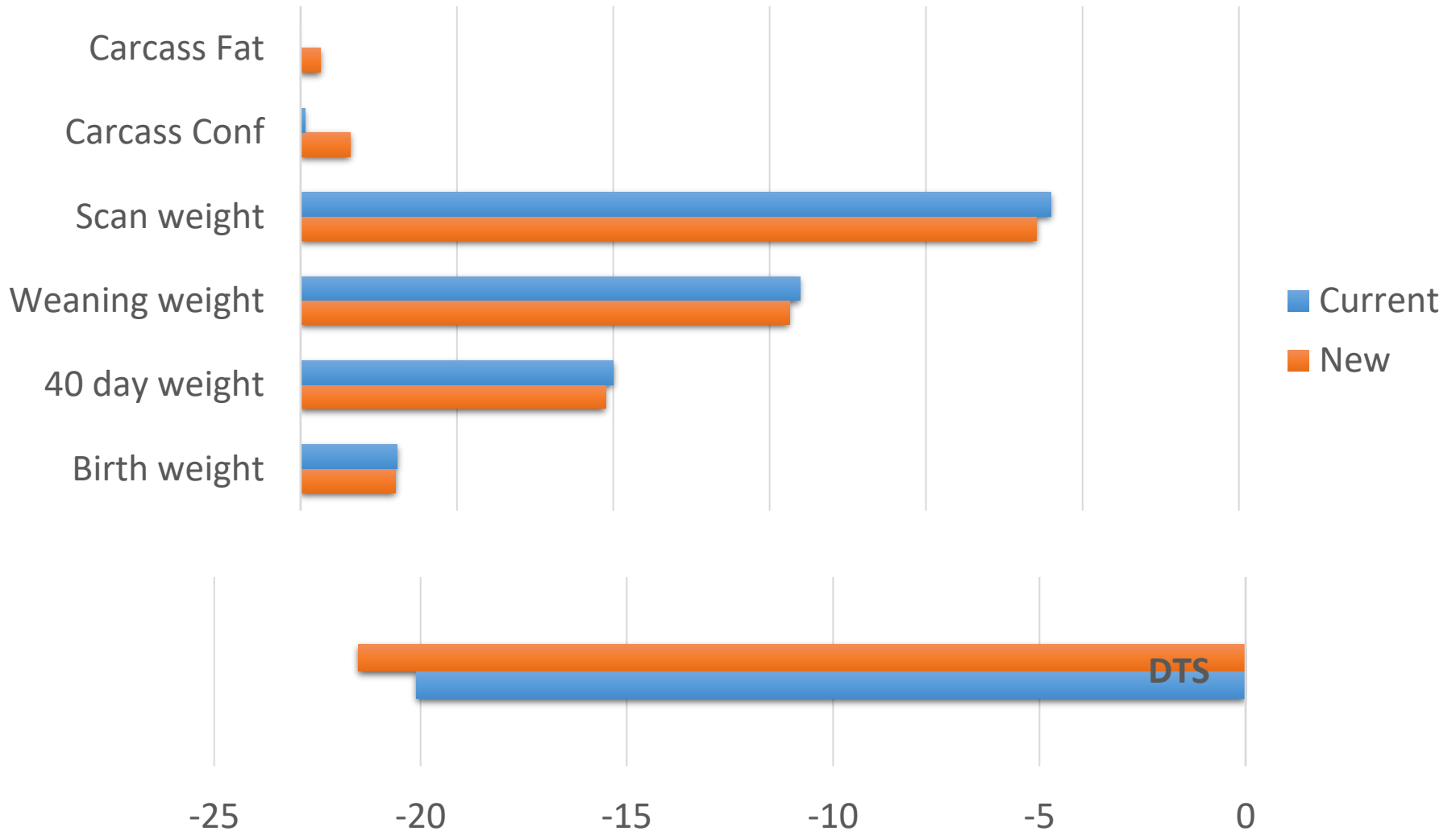
Impact on Indexes

Replacement Index

Conclusions

- Large amounts of carcass data included in indexes

- More accurate evaluations

- Some movement in individual animal indexes

- Selecting animals with superior growth and carcass characteristics

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SMARTER PARTNERS

Thank you for your attention

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