



BC Broiler Hatching Eggs Hatchery Margin, Breeder Chick & Vaccine Prices

FEBRUARY 3, 2021





BC Broiler Hatching Eggs *Sub-Committee*

FEBRUARY 3, 2021



Sub-Committee

To further discussion on pricing-related topics, a sub-committee was established between the BC Egg Hatchery Association (BCEHA) and the BC Broiler Hatching Egg Commission (BCBHEC). These topics fall into three main categories:

1. Hatchery Margin
2. Breeder Chick Cost/Price
3. Vaccine Cost/Price

Discussions were productive and reached a point where the provided document (“*Hatchery Margin Calcs – for Sub-Committee*”) laid the groundwork for what was tabled to the BCEHA to take back to its members in October 2019.

Sub-Committee

The document summarized those three main categories.

This presentation speaks to this summary by breaking out each of these three categories, exploring the background and the ideas generated by the sub-committee, the considerations remaining, and effects on pricing where applicable.

Hatchery Margin Calcs – for Sub-Committee (UPDATED MARGINS)

Hatchery Margin & Breeder Margin (What a Breeder margin means in Saleable Chick)

Breeder Price Margin (% on Female Breeder Cost)	Breeder Price Margin (\$/Female Breeder)	Breeder Price Margin (¢/SC) – crystallized, part of breeder cost	Hatchery Margin Increase (¢/SC) – pure margin increase?	Crystallization bonus / incentive†	New BC Margin Increase – with crystallized breeder margin?	Current BC-ON Margin Spread – table next page	Revised BC-ON Margin Spread	w/o Breeder price margin (as kept \$ in cost below)
5%	\$0.4950	0.43¢	1.75¢	0.30¢	2.48¢	6.41¢	3.93¢	4.36¢
10%	\$0.9900	0.86¢	1.75¢	0.15¢	2.76¢	6.41¢	3.65¢	4.51¢
15%	\$1.4850	1.29¢	1.75¢	0.00¢	3.04¢	6.41¢	3.37¢	4.66¢
20%	\$1.9800	1.72¢	1.28¢	0.00¢	3.00¢	6.41¢	3.41¢	5.13¢

Blue highlight = recommendation; † Receives annual COLA; ‡ Negotiable item

- Current price, female breeder chick: \$9.90.
- See formulae to derive cost, and gross profit (margin), on next page.
- Female breeder chick margin at 20%, in dollars = \$1.98 / \$9.90 = 20%.
- Female breeder chick margin at 20%, in cents per saleable chick = \$1.98 / 115 SC = 1.72 ¢/SC.
- Optional: Crystallization bonus/incentive of 0.15¢ at 10%, 0.30¢ at 5%.

Breeder Price

Option	Cost Formula	Margin Amount / Location
A	Breeder Co. (\$) + Forex (\$) + Services (\$)	Crystallized as ¢/SC in Hatchery Margin†
B	Breeder Co. (\$) + Forex (\$) + Services (\$) + Margin (\$)	Crystallized as \$ in breeder cost formula‡

Blue highlight = recommendation; † Receives annual COLA; ‡ May receive annual COLA

- Breeder Co. (\$) is cost from breeder companies in USD.
- Forex (\$) is a calculation (TBD) to translate USD to CAD. Use of Bank of Canada rates expected.
- Services (\$) is for services such as dubbing, beak trimming, etc.
- Option that crystallized margin (\$) left in breeder cost formula could be indexed (COLA).



BC Broiler Hatching Eggs *Hatchery Margin*

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Hatchery Margin



The hatchery margin is the amount earned by the hatchery, on a per chick basis, between what they pay to the Producer (saleable chick price) and the price charged to Growers (day-old chick price).

The hatchery margin is a fixed at \$0.1894 per chick.

In the current Linkage-based pricing model, the prices received by Producers for their saleable chicks and paid by Growers for their day-old chicks are heavily influenced by the live kg price.

Hatchery Margin



The price for kilograms of eviscerated chicken, as set by BC Chicken Marketing Board (per its pricing model) is inputted into the Linkage algorithm which is set to balance the returns between Producers and Growers: parity.

The extent to which the saleable chick and day-old prices may move each period to achieve parity does not affect the hatchery margin – it remains at \$0.1894.

Hatchery Margin



Period	Saleable Chick	Hatchery Margin	Day-Old Chick	Live Price	Recovery (Parity)
A165	\$0.6330	\$0.1894	\$0.8224	\$1.684/kg	93.16%
A166	\$0.6431	\$0.1894	\$0.8325	\$1.690/kg	93.18%
A167	\$0.6633	\$0.1894	\$0.8527	\$1.757/kg	96.11%



Hatchery Margin

Period	Effective Date (Chicks)	Saleable Chick	Hatchery Margin	Day-Old Chick
A107	October 30, 2011	\$0.5606	\$0.1693	\$0.7299
A108	December 25, 2011	\$0.5386	\$0.1793 (\$0.010 ↑)	\$0.7179
A109	February 19, 2012	\$0.5220	\$0.1793	\$0.7013
A110	April 15, 2012	\$0.53075	\$0.1893 (\$0.010 ↑)	\$0.7200

History of margin increases in the since January 2010 (Period A96)

The net increase of \$0.020 to the hatchery margin (11.8%) was phased in over 3 pricing periods.

Historically there has been no set review period regarding the hatchery margin.

Consultations with affected stakeholders are required to facilitate any request to change (increase) the hatchery margin.



Hatchery Margin

Current	Increase	New
\$0.1894	\$0.0175 (9.2%)	\$0.2069

The margin increase request equates to 9.2% increase over its current rate.

Date	Rate	New Price
2013	1.0%	\$0.1913
2014	1.0%	\$0.1932
...
2020	1.0%	\$0.2049
2021	1.0%	\$0.2069

The last increase was effective April 2012, approximately 9 years ago.

The effective annual compound rate would be 1.0%, as illustrated.



Hatchery Margin



As illustrated at the COP roundtable, as lay cycle increases, price per saleable chick and day-old chick price decrease.

It is important to note that as the hatchery margin is static, it does not participate in efficiencies that may be experienced by the system as more chicks are throughput (i.e. no hatchery COP).

It has been stated by certain stakeholders that due to this efficiency mechanism, any profitability in the system for farmers has been due to volume increases recently experienced as recovery parity remains systematically below 100%. This presentation does not explore these points.

Hatchery Margin

Saleable Chick Price



Hatchery Margin

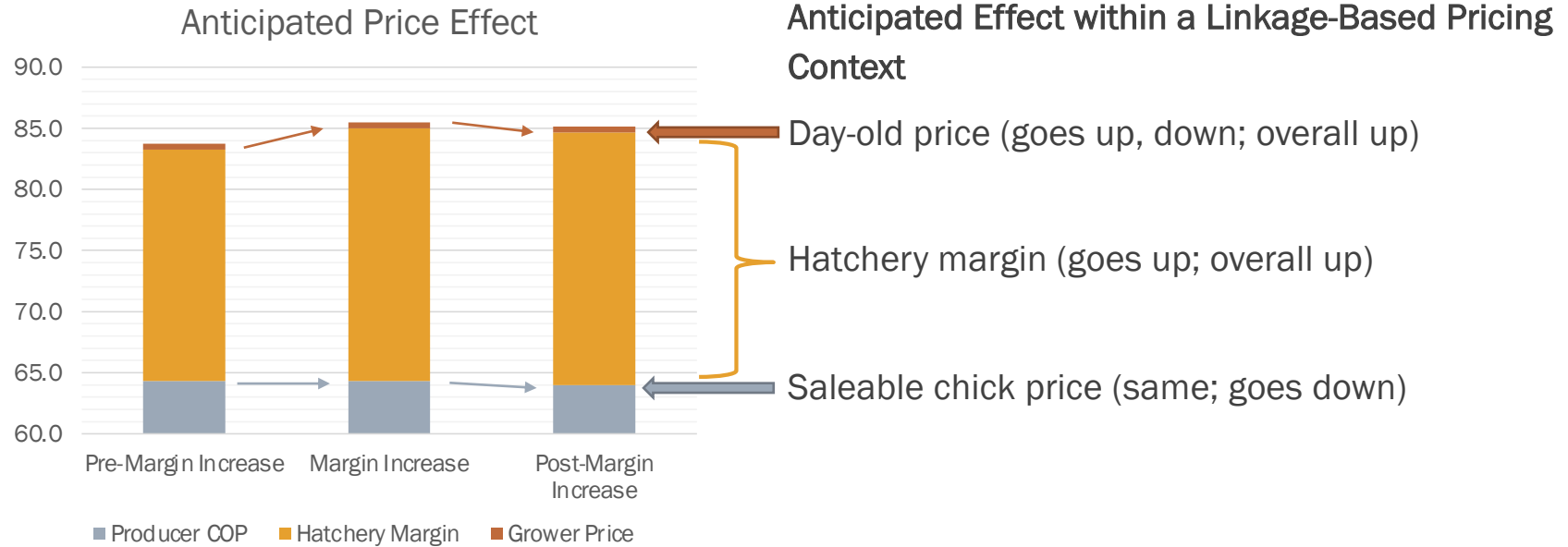


Day-Old Chick Price

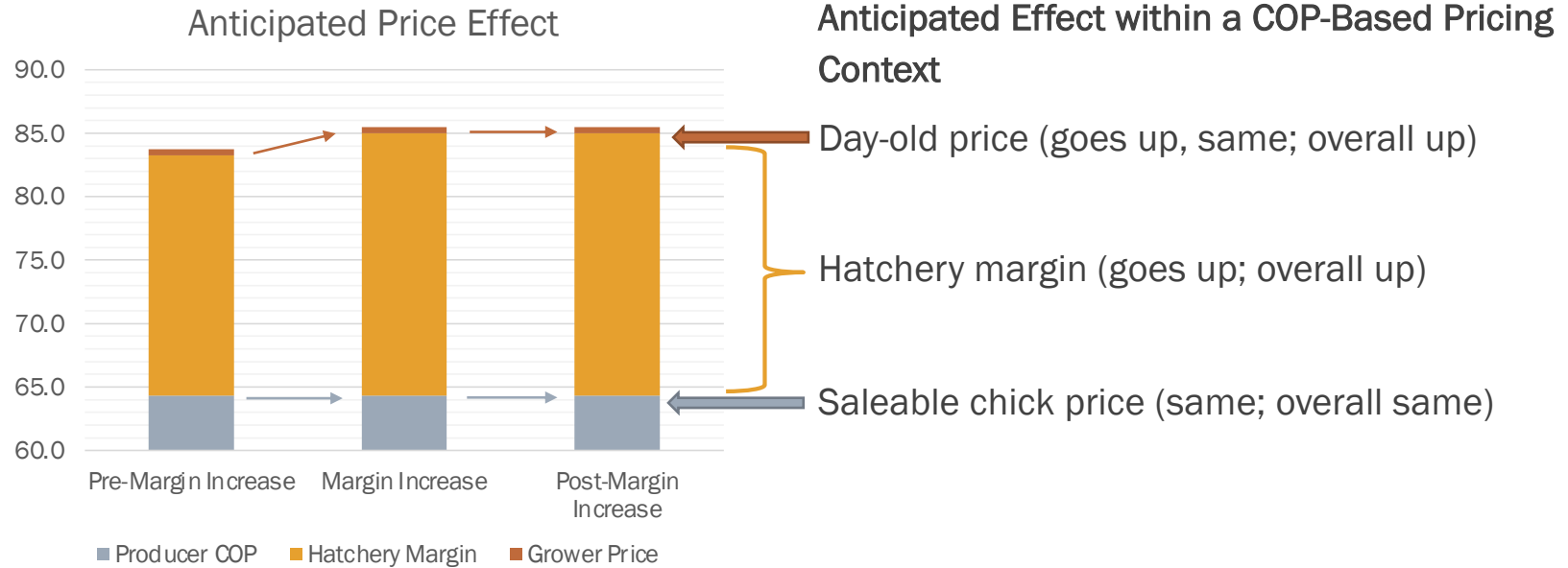
Difficulties arise in building scenarios given how inter-related many aspects of pricing are.

However, based on the live kg pricing algorithm, it is generally understood that 75% of any increase in day-old price is, over time, recovered through the live kg price.

Hatchery Margin



Hatchery Margin



Hatchery Margin

Considerations for going forward

- Include a regular mechanism to review the margin, such as an MOU?
- Provide indexing such as a cost-of-living adjustment, and using what index?
- Require a third-party review of costs for indexing or future adjustments?
- Hatchery efficiency inclusion?
- COP-based inclusion, similar to the Ontario model?

Potential Index	Apr 2012 – Oct 2018
CPI – all items, Canada	1.44%
CPI – all items, BC	1.40%
Industrial Products Price Index – excl. petroleum & coal	1.44%
IPPI – meat, fish and dairy products	1.90%
Raw Materials Price Index	Excluded – below 0%
RMPI – excl. mineral fuels	Excluded – below 0%
RMPI – animal and animal products	Excluded – below 0%
Employees, avg hourly wages – Natural resources, agriculture and related production occupations	3.07%



BC Broiler Hatching Eggs *Breeder Chick Price*

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Breeder Chick Price

BC Broiler Hatching Egg industry operates using a hen-based quota system.

The Commission sends out placement dates and amounts to hatcheries who in turn place orders with the breeder companies for eggs (local hatch) or chicks (fly-in or truck-in).

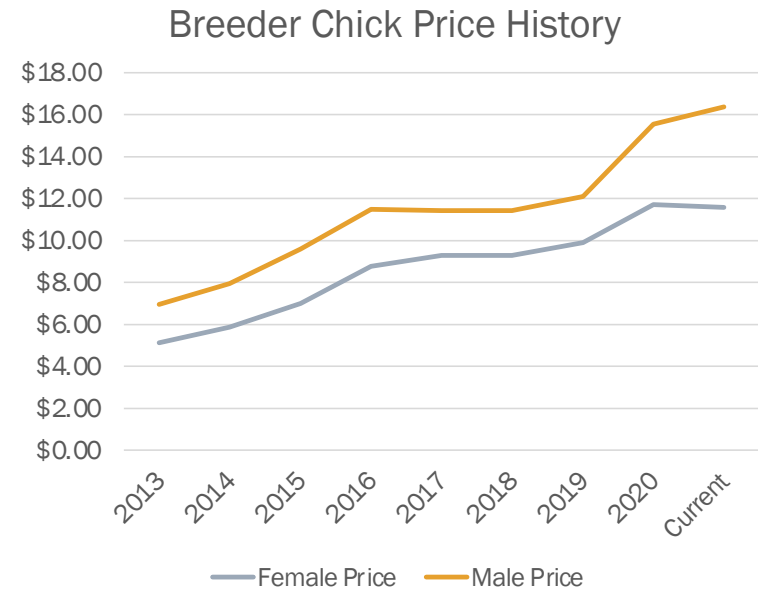
Producers are free to order the male percentage that suits their farm best, but 12-13% of the female order is recommended.

Hatcheries set the price, and report that said price to the Commission every 8 weeks for its inclusion into Linkage.

Producers currently pay their assigned hatchery directly for their day-old breeder chicks.

Breeder Chick Price

Month	Female Price	Male Price
Current	\$11.59	\$16.37
May 2020	\$11.71	\$15.56
May 2019	\$9.90	\$12.09
May 2018	\$9.30	\$11.43
Aug 2017	\$9.30	\$11.43
May 2016	\$8.78	\$11.47
May 2015	\$7.00	\$9.59
May 2014	\$5.86	\$7.93
May 2013	\$5.12	\$6.95



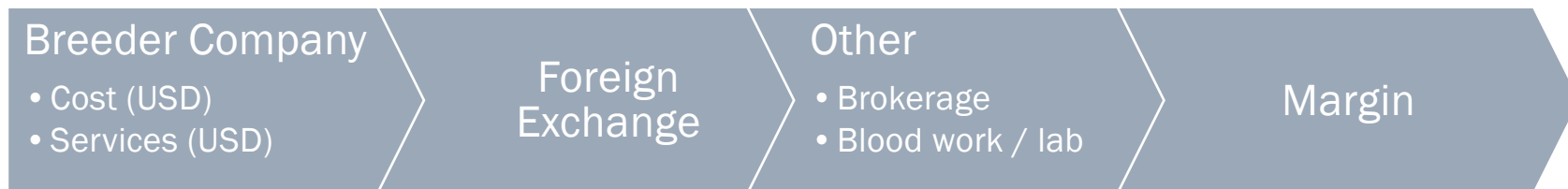
Breeder Chick Price

Month	Female Price	Male Price
Current	\$11.59	\$16.37
May 2013	\$5.12	\$6.95
Increase	\$6.47 (126%)	\$9.42 (136%)
Annualized (~ 8 years)	10.8%	11.3%

A significant increase in pricing has been experienced by the sector. A large amount of the increase is attributable to breeder company price increases, per hatcheries.

The cost of breeder chicks is factored into the Linkage, but through the work at the sub-committee, a commitment to transparency and establishing formulae to achieve this began.

Breeder Chick Price



Significant components of the breeder chick price include company cost, foreign exchange, other services and margin.

At this time, prices paid by Producers depend on the breed selected by their assigned hatchery. Therefore, although the Linkage will be updated for an average price, Producers do not experience the same costs at the placement of their flock.

Not considered in this presentation are offlines, breeder company loyalty programs, payment discounts.

Breeder Chick Price



Cost (USD)

- Consideration of applying an average price to Producer regardless of selected breed (formula)
- Potential to include current breed mix and weighted by the market share of each hatchery
- Potential to have one set price per bird regardless of sex
- Potential to set the male order percentage
- Establishing a mechanism for updating this component is at the sub-committee level

Breeder Chick Price



Services (USD)

- Consideration of Services, including:
 - Beak trimming
 - Vaccines provided by breeder companies
 - Set figure was provided for services
- Establishing a mechanism for updating this component is at the sub-committee level

Breeder Chick Price



Foreign Exchange

- Consideration of what rate to use (Bank of Canada)
 - Spot rate (single date) or band of time (e.g. average past 8 weeks, 3 mos.)
- Establishing a mechanism for updating this component is at the sub-committee level

Breeder Chick Price



Other

- Brokerage
 - Set figure was provided for brokerage
- Blood work / lab
 - No figure was provided
- Establishing a mechanism for updating this component is at the sub-committee level

Breeder Chick Price



Margin

- It was stated that hatcheries apply a 20% margin to the costs of the breeder chick after foreign exchange conversion and any brokerage fees, and this covers the cost of providing the service of placing the breeder chicks on the Producers' farms.
- At the then female price of \$9.90, a margin on that chick would have been \$1.9800.
- The margin is applied to costs that are generally not in the control of either the Commission or the hatcheries.

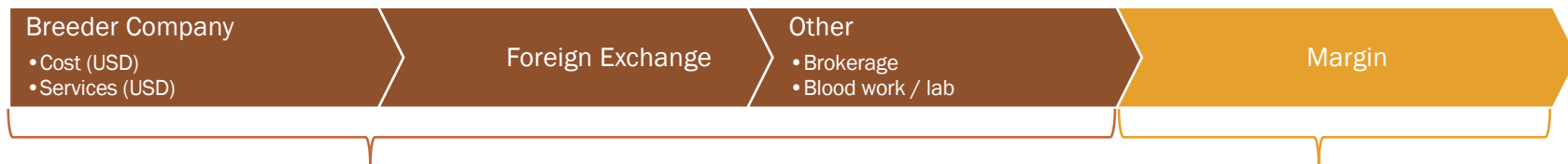
Breeder Chick Price



Margin

- The Commission's position is that the margin should not be applied in this manner and would prefer it be crystallized (\$1.98/hen). This can be reflected in the formula in one of two ways:
 - As part of the Breeder Chick Price Formula as a set \$1.98/hen.
 - As part of the Hatchery Margin, where the hatchery receives such margin over the expected saleable chicks from those hens (\$1.98 / appx 115 chicks = 1.72¢ per chick)

Breeder Chick Price



As set by formulae and updated on agreed interval

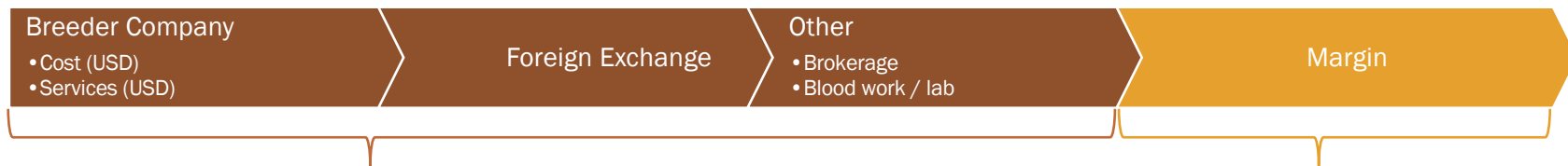
Set at \$1.98/breeder chick
Updated on agreed interval

Net effect

Producers would pay cost as determined through transparent pricing + a set margin.
This figure would flow through the COP as is current practice (no change).

Example: Should breeder company prices increase, producers will not be charged beyond the CAD-equivalent of that increase.

Breeder Chick Price



As set by formulae and updated on agreed interval

Set at 1.72¢/saleable chick
Updated on agreed interval

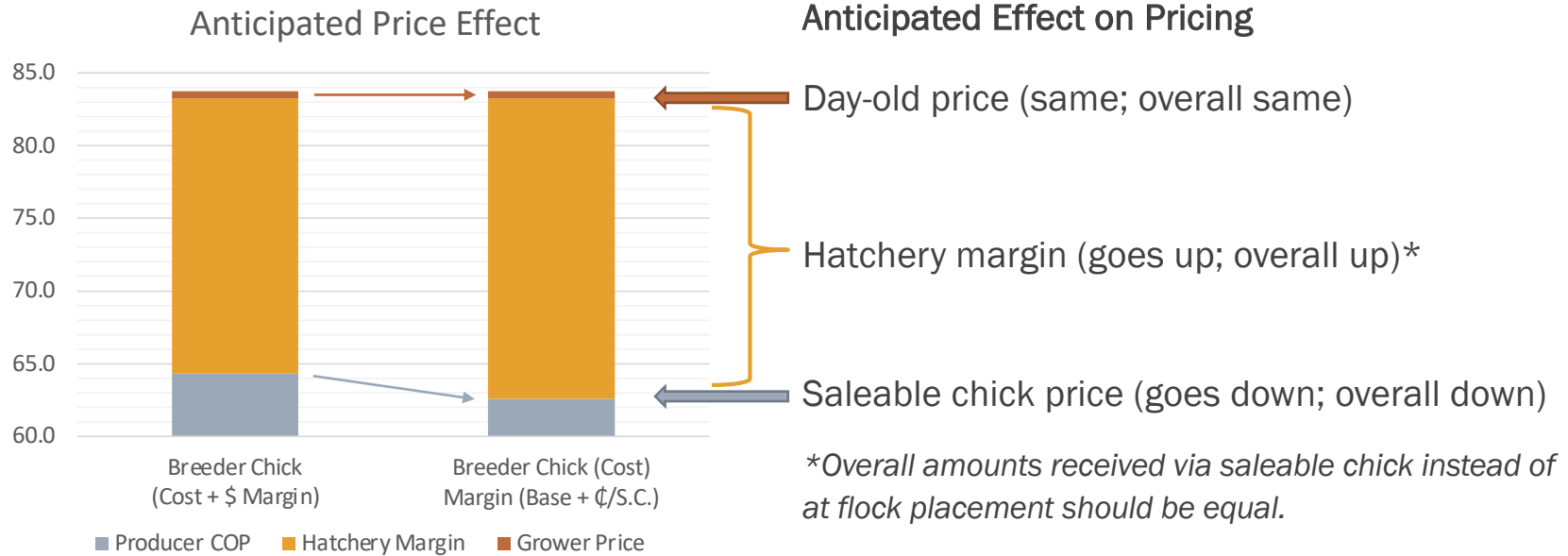
Net effect

Producers would pay cost as determined through transparent pricing ~~+ a set margin~~.

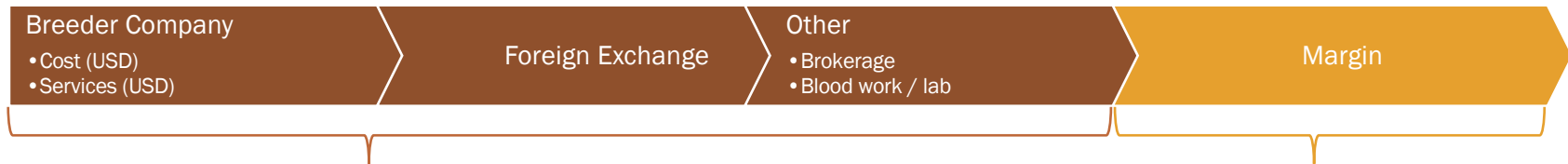
This figure would flow through the COP as is current practice, reducing the COP and amount due by hatcheries on saleable chick.

The amount would be recaptured in the hatchery margin. No net change to the day-old chick price.

Breeder Chick Price



Breeder Chick Price



As set by formulae and updated on agreed interval

Set at 1.72¢/saleable chick
Updated on agreed interval

Overall Anticipated Effect under COP-Based Pricing

Saleable chick price goes down 1.72¢/saleable chick; recovery % goes up.

Hatchery margin goes up 1.72¢/saleable chick.

No net change to the day-old chick price.





BC Broiler Hatching Eggs *Vaccine Price*

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Vaccine Price

Vaccinations have a significant impact on Producer flocks' progeny.

Similar to the Breeder Chick Price, the amount paid by Producers varies depending on the vaccination schedule of their assigned hatchery.

There are also differences in cost depending on whether the vaccine is commercial or autogenous (more expensive).

Mandatory vaccination schedules are routinely updated by hatcheries in response to disease issues on broiler farms; the inclusion of a cost to the COP/Linkage requires attention to ensure timely incorporation.

The cost of vaccines is included in the Pullet line of the COP.

	2020 COP
Pullets (total)	\$28.44 / hen
↳ Vaccines	\$ 1.40 / hen (4.9%)



BC Broiler Hatching Eggs *Summary*

FEBRUARY 3, 2021



Summary for Sub-Committee

Hatchery Margin & Breeder Margin (What a Breeder margin means in Saleable Chick)

Breeder Price Margin (% on Female Breeder Cost)	Breeder Price Margin (\$/Female Breeder) – <i>crystallized, remains as breeder cost</i>	Breeder Price Margin (¢/SC) – <i>crystallized, part of hatchery margin (to get COLA)</i>	Hatchery Margin Increase (¢/SC) – <i>pure margin increase†</i>	Crystallization bonus / incentive‡	New BC Margin Increase – <i>with crystallized breeder margin†</i>	Current BC-ON Margin Spread – <i>table next page</i>	Revised BC-ON Margin Spread	w/o Breeder price margin (as kept \$ in cost below)
5%	\$0.4950	0.43¢	1.75¢	0.30¢	2.48¢	6.41¢	3.93¢	4.36¢
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The summary had brought together the breeder price and ‘pure’ hatchery margin increase but will require revision upon outcomes that remain at the sub-committee member level.

Comments & Questions

