

# Analysis DowDuPont

The purpose of this analysis is to determine precisely why an inconsistency was detected in an XBRL-based financial report and what should be corrected in order to make the inconsistency go away and make the financial report a properly functioning logical system, without inconsistencies. There are FOUR possible things that might need to be adjusted:

1. The report and/or report model of the economic entity creating the report.
2. The rules used to evaluate the report.
3. The base XBRL taxonomy used to create the report.
4. The rules engine software used to process the report and rules.

In this report the following inconsistencies are reported:

<https://ipfs.infura.io/ipfs/QmUM2BLXe5AUPY216FgVuonrPNLkF6CsMTzoWyWa9TFh8L>

2	FAC - 101-Balance Sheet, Classified	Structures	Facts	Pivots	
3	FAC - 208.6-Income Statement, Single Step (No Gross Profit Reported, No Operating Income Reported), No Expense Total	Structures	Facts	Pivots	
4	FAC - 211-Net Income (Loss) Breakdown	Structures	Facts	Pivots	
5	FAC - 212-Net Income (Loss) Available to Common Breakdown	Structures	Facts	Pivots	
6	FAC - 301-Statement of Comprehensive Income	Structures	Facts	Pivots	
7	FAC - 311-Comprehensive Income (Loss) Breakdown	Structures	Facts	Pivots	
8	FAC - 401-Cash Flow Statement	Structures	Facts	Pivots	
9	FAC - 411.1-Net Cash Flow Breakdown	Structures	Facts	Pivots	
10	FAC - 420.1-Continuing and Discontinued Net Cash Flow Breakdown	Structures	Facts	Pivots	
11	FAC - 601-Key Ratios	Structures	Facts	Pivots	
12	FAC - 701.2-Validation Results (No IS11)	Structures	Facts	Pivots	

5	inconsistency	FAC_CONSISTENCY_19	NetIncomeLossAvailableToCommonStockholdersBasic=NetIncomeLossAttributableToParent-PreferredStockDividendsAndOtherAdjustments
6	inconsistency	fac:NetIncomeLossAvailableToCommonStockholdersBasic (in NetIncomeLossAvailableToCommonBreakdown)	total=NetIncomeLossAttributableToParent_2+ -PreferredStockDividendsAndOtherAdjustments_1

First, not that the inconsistency relates to item #5 in the list above, the Net Income (Loss) Available to Common Breakdown which has a RED bar to the right side. The ORANGE bars indicate some sort of “logical bleed” into other areas of the report from the primary cause of the issue. This “logical bleed” is a feature provided by the software application which (a) can be helpful in resolving issues and sometimes (b) can be a distraction. Accountants need to figure how whether this is more helpful or more distracting. This logical bleed can be removed or provided as an option perhaps. The final state of this “logical bleed” feature is still to be determined.

Going to #5 the Net Income (Loss) Available to Common Breakdown you see the following:

<https://bafybeiczhs25lm3eta3z4bzqoehtsb23tvdxdhjeutmhb7gipyjfcwg3e.ipfs.infura-ipfs.io/e6865f8c7e5e41130cdb.html#92c43cc5478e8a53a000>

Concept	Period	2021-01-01 to 2021-12-31
Net Income (Loss) Available to Common Stockholders, Basic [Roll Up]		
Net Income (Loss) Attributable to Parent		1,759,000,000
Preferred Stock Dividends and Other Adjustments		0
Net Income (Loss) Available to Common Stockholders, Basic		<u>2.39</u>

The value “2.39” appears very unusual for the line item “Net Income (Loss) Available to Common Shareholders, Basic”.

If you go to #4 Net Income (Loss) Breakdown you see:

<https://bafybeiczhs25lm3eta3z4bzqoehtsb23tvdxdhjeutmhb7gipyjfcwg3e.ipfs.infura-ipfs.io/f7eaf5d2a04b087e9293.html#aad490beec4f60b624af>

Concept	Period	2021-01-01 to 2021-12-31
Net Income (Loss) [Roll Up]		
Net Income (Loss) Attributable to Parent		1,759,000,000
Net Income (Loss) Attributable to Noncontrolling Interest		10,000,000
Net Income (Loss)		<u>1,769,000,000</u>

Everything above appears correct. The reason the line item “Net Income (Loss) Attributable to Parent” is yellow in color is because of the mathematical error in #5.

If you go to the filers Inline XBRL page and you search on the fact “2.39” you begin to see what is causing the inconsistency which has been reported by Pacioli:

<https://www.sec.gov/ix?doc=/Archives/edgar/data/30554/000175567222000005/ctva-20211231.htm>

If you go to NOTE 11 - EARNINGS PER SHARE OF COMMON STOCK you will see the following:

[http://xbrlsite.com/2022/fortune100/dowdupont/Note\\_DuPont.jpg](http://xbrlsite.com/2022/fortune100/dowdupont/Note_DuPont.jpg)

NOTE 11: EARNINGS PER SHARE OF COMMON STOCK

On June 1, 2019, the date of the Corvea Distribution, 748,317,000 shares of the company's common stock were distributed to DowDuPont shareholders as of May 24, 2019.

The following tables provide earnings per share calculations for the periods indicated below:

Net Income (Loss) for Earnings Per Share Calculations - Basic and Diluted (In millions)	For the Year Ended December 31,		
	2021	2020	2019
Income (loss) from continuing operations after income taxes	1,875	556	2,135
Net income (loss) attributable to continuing operations noncontrolling interests	35	35	31
Income (loss) from continuing operations attributable to Corvea's common stockholders	1,840	521	2,104
(Loss) income from discontinued operations, net of tax	(21)	(21)	(81)
Net income (loss) attributable to discontinued operations noncontrolling interests	—	—	1
(Loss) income from discontinued operations attributable to Corvea's common stockholders	(21)	(21)	(80)
Net income (loss) attributable to common stockholders	1,798	480	2,024

  

Earnings (Loss) Per Share Calculations - Basic (Dollar per share)	For the Year Ended December 31,		
	2021	2020	2019
Earnings (loss) per share of common stock from continuing operations	2.46	0.95	0.38
(Loss) earnings per share of common stock from discontinued operations	(0.27)	(0.27)	(0.95)
Earnings (loss) per share of common stock	0.99	0.68	(1.57)

  

Earnings (Loss) Per Share Calculations - Diluted (Dollar per share)	For the Year Ended December 31,		
	2021	2020	2019
Earnings (loss) per share of common stock from continuing operations	2.44	0.95	0.38
(Loss) earnings per share of common stock from discontinued operations	(0.27)	(0.27)	(0.95)
Earnings (loss) per share of common stock	2.39	0.68	(1.57)

  

Share Count Information (Shares in millions)	For the Year Ended December 31,		
	2021	2020	2019
Weighted-average common shares - basic <sup>1</sup>	733.5	748.5	748.5
Plus dilutive effect of equity compensation plans <sup>2</sup>	3.0	3.0	—
Weighted-average common shares - diluted	744.4	751.5	748.5
Potential shares of common stock excluded from EPS calculations <sup>2</sup>	9.1	9.2	11.0

1. Shares issued for all periods prior to the Corvea Distribution were based on 748 million shares of Corvea, Inc. common stock distributed to holders of DowDuPont's common stock on June 1, 2019, plus 17 million of additional shares in which accelerated vesting conditions for a time out.  
2. Diluted earnings (loss) per share considers the impact of potentially dilutive securities except in periods in which there is a loss because the inclusion of the potential common shares would have an anti-dilutive effect.

In NOTE 11: Earnings Per Share, you will see that DowDuPont used the concept “us-gAAP:NetIncomeLossAvailableToCommonStockholdersBasic” to represent the line item “Earnings (loss) per share of common stock”.

The PROBLEM IS that the concept us-gAAP:NetIncomeLossAvailableToCommonStockholdersBasic is intended to represent the amount of INCOME (LOSS) AVAILABLE TO COMMON SHAREHOLDERS; **NOT THE PER SHARE AMOUNT**. If you look at how others are using that same concept, this error is very obvious.

Attributes

**Net Income (Loss) Available to Common Stockholders, Basic**

Tag us-gAAP:NetIncomeLossAvailableToCommonStockholdersBasic

Fact 2.39

Period 12 months ending 12/31/2021

Measure USD

Scale Zero

Decimals Hundredths

Balance Credit

Reading the documentation for the concept it becomes clear that the wrong concept was used to represent that line item in Note 11:

The screenshot shows a window titled "Labels" with a dark blue header. Below the header, the title "Net Income (Loss) Available to Common Stockholders, Basic" is centered. A table with three rows is displayed:

	Net Income (Loss) Available to Common Stockholders, Basic
<b>Documentation</b>	Amount, after deduction of tax, noncontrolling interests, dividends on preferred stock and participating securities; of income (loss) available to common shareholders.
<b>Label</b>	Net Income (Loss) Available to Common Stockholders, Basic
<b>Total Label</b>	Basic (loss) earnings per share of common stock

At the bottom of the window, there is a navigation bar with a left arrow, a progress indicator (a blue bar between two white bars), and a right arrow.

**Correction of this inconsistency:**

To correct this inconsistency, the reporting entity should use the correct concept to represent the line item "Earnings (loss) per share of common stock".

This error can also be seen using the interactive data viewer provided by the SEC:

<https://www.sec.gov/Archives/edgar/data/30554/000175567222000005/0001755672-22-000005-index.htm>

Navigate to the disclosure note "Earnings Per Share of Common Stock EPS Calculation – Basic (Details):

<a href="#">Narrative (Details)</a>
<a href="#">Earnings Per Share Net Income for Earnings Per Share Calculations - Basic and Diluted (Details)</a>
<a href="#">Earnings Per Share of Common Stock EPS Calculation - Basic (Details)</a>
<a href="#">Earnings Per Share of Common Stock EPS Calculation - Diluted (Details)</a>
<a href="#">Earnings Per Share Share Count Information (Details)</a>

**DUPONT E I DE NEMOURS & CO (Filer) CIK: 0000030554**  
**Corteva, Inc. (Filer) CIK: 0001755672**

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10-K
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Earnings Per Share of Common Stock EPS Calculation - Basic (Details) - USD (\$)	12 Months Ended		
	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2019
<b>Earnings Per Share [Abstract]</b>			
Basic earnings (loss) per share of common stock from continuing operations	\$ 2.46	\$ 0.98	\$ (0.38)
Basic earnings (loss) per share of common stock from discontinued operations	\$ (0.07)	\$ (0.07)	\$ (0.90)
<b>Basic (loss) earnings per share of common stock</b>	<b>\$ 2.39</b>	<b>\$ 0.91</b>	<b>\$ (1.28)</b>

**- Definition**  
Amount, after deduction of tax, noncontrolling interests, dividends on preferred stock and participating securities; of income (loss) available to common shareholders.

**+ References**

**- Details**

**Name:** us-gaap\_NetIncomeLossAvailableToCommonStockholdersBasic

**Namespace Prefix:** us-gaap\_

**Data Type:** xbrli:monetaryItemType

**Balance Type:** credit

**Period Type:** duration