

Analysis of 3M Report

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/QmS2JbN4N2XwdKsFpVg9MwRA2uZCF1M4Z16SbVdx2v6ddM>

1	FAC - 001-General Information	Structures	Facts	Pivots
2	FAC - 101-Balance Sheet, Classified	Structures	Facts	Pivots
3	FAC - 201.6b-Income Statement, Single Step, With Operating Income, Special 2 (Costs and Expenses), Equity method income in tax	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

6	inconsistency	fac:IncomeLossFromContinuingOperationsAfterTax (in IncomeStatementSingleStep_Special2_IEMI_Taxes)	total=IncomeLossFromContinuingOperationsBeforeTax_3+(-IncomeTaxExpenseBenefit_2+IncomeLossFromEquityMethodInvestments_1)
7	inconsistency	fac:NetIncomeLoss (in IncomeStatementSingleStep_Special2_IEMI_Taxes)	total=IncomeLossFromContinuingOperationsAfterTax_3+(IncomeLossFromDiscontinuedOperationsNetOfTax_2+ExtraordinaryItemsOfIncomeExpenseNetOfTax_1)

The inconsistency in this report relates to the Income Statement, #3 shown above with the red bar on the right side of the table.

Going to the Income Statement “Pivots” which is a human readable rendering of the information, you see the following:

	Period	2021-01-01 to 2021-12-31
Concept		
Net Income (Loss) [Roll Up]		
Income (Loss) from Continuing Operations After Tax [Roll Up]		
Income (Loss) from Continuing Operations Before Tax [Roll Up]		
Operating Income (Loss) [Roll Up]		
Revenues		35,355,000,000
Costs and Expenses		27,986,000,000
Other Operating Income (Expenses)		0
Operating Income (Loss)		7,369,000,000
Nonoperating Income (Loss) Plus Interest and Debt Expense		(165,000,000)
Income (Loss) from Continuing Operations Before Tax		7,204,000,000
Income Tax Expense (Benefit)		1,285,000,000
Income (Loss) from Equity Method Investments		10,000,000
Income (Loss) from Continuing Operations After Tax		5,919,000,000
Income (Loss) from Discontinued Operations, Net of Tax		0
Extraordinary Items of Income (Expense), Net of Tax		0
Net Income (Loss)		5,929,000,000

Viewing the full income statement using XBRL Cloud you see:

Income Statement [Abstract]	Period [Axis]		
	2021-01-01 - 2021-12-31	2020-01-01 - 2020-12-31	2019-01-01 - 2019-12-31
Income Statement [Abstract]			
Net sales	35,355,000,000	32,184,000,000	32,136,000,000
Operating expenses			
Cost of sales	18,795,000,000	16,605,000,000	17,136,000,000
Selling, general and administrative expenses	7,197,000,000	6,929,000,000	7,029,000,000
Research, development and related expenses	1,994,000,000	1,878,000,000	1,911,000,000
Gain on sale of businesses	0	(389,000,000)	(114,000,000)
Total operating expenses	27,986,000,000	25,023,000,000	25,962,000,000
Operating income	7,369,000,000	7,161,000,000	6,174,000,000
Other expense (income), net	165,000,000	366,000,000	531,000,000
Income before income taxes	7,204,000,000	6,795,000,000	5,643,000,000
Provision for income taxes	1,285,000,000	1,337,000,000	1,114,000,000
Income of consolidated group	5,919,000,000	5,458,000,000	4,529,000,000
Income (loss) from unconsolidated subsidiaries, net of taxes	10,000,000	(5,000,000)	0
Net income including noncontrolling interest	5,929,000,000	5,453,000,000	4,529,000,000
Less: Net income (loss) attributable to noncontrolling interest	8,000,000	4,000,000	12,000,000
Net income attributable to common stock	5,921,000,000	5,449,000,000	4,517,000,000

us-gaap:IncomeLossFromContinuingOperationsIncludingPortionAttributableToNoncontrollingInterest

A similar view of the information provided by XBRL Cloud looks as follows:

<http://xbrlsite.com/site1/2022/fortune100/wellsfargo/evidence-package/contents/index.html#USFACRenderingSummary.html>

Statement of Comprehensive Income (Loss) [Line Items]	Period [Axis]	
	2021-01-01 - 2021-12-31	
	Value	Origin
Comprehensive Income (Loss) [Roll Up]		
Net Income (Loss) Attributable to Parent	21,548,000,000	fac:NetIncomeLossAttributableToParent[us-gaap:NetIncomeLoss[21,548,000,000]]
Other Comprehensive Income (Loss)	(1,897,000,000)	fac:OtherComprehensiveIncomeLoss[us-gaap:OtherComprehensiveIncomeLossNetOfTax[-1,897,000,000]]
Comprehensive Income (Loss)	21,341,000,000	fac:ComprehensiveIncomeLoss[us-gaap:ComprehensiveIncomeNetOfTaxIncludingPortionAttributableToNoncontrollingInterest[21,341,000,000]]
Validation Results [Hierarchy]		
IS10	OK	fac:ComprehensiveIncomeLoss[us-gaap:ComprehensiveIncomeNetOfTaxIncludingPortionAttributableToNoncontrollingInterest[21,341,000,000]] = (fac:NetIncomeLossAttributableToParent[us-gaap:NetIncomeLoss[21,548,000,000]] + fac:OtherComprehensiveIncomeLoss[us-gaap:OtherComprehensiveIncomeLossNetOfTax[-1,897,000,000]])

XBRL Cloud and Pacioli are providing the same information organized in different ways. The XBRL Cloud is far more helpful in terms of understanding what is going on within the report. Looking at the actual report information per XBRL Cloud you see the following:

Statement [Line Items]	Period [Axis]					
	2021-01-01 - 2021-12-31		2020-01-01 - 2020-12-31		2019-01-01 - 2019-12-31	
	Equity Components [Axis]		Equity Components [Axis]		Equity Components [Axis]	
	Total Wells Fargo stockholders' equity [Member]	Equity Component [Domain]	Total Wells Fargo stockholders' equity [Member]	Equity Component [Domain]	Total Wells Fargo stockholders' equity [Member]	Equity Component [Domain]
Net income before noncontrolling interests		23,238,000,000		3,662,000,000		20,206,000,000
Other comprehensive income (loss), net of tax:						
Net change in debt securities		(2,375,000,000)		1,487,000,000		4,193,000,000
Net change in derivatives and hedging activities		159,000,000		149,000,000		207,000,000
Defined benefit plans adjustments		349,000,000		(181,000,000)		73,000,000
Net change in foreign currency translation adjustments		(30,000,000)		50,000,000		71,000,000
Other comprehensive income (loss), after tax	(1,896,000,000)	(1,897,000,000)	1,505,000,000	1,505,000,000	4,544,000,000	4,544,000,000
Total comprehensive income before noncontrolling interests		21,341,000,000		5,167,000,000		24,750,000,000
Less: Other comprehensive loss from noncontrolling interests		(1,000,000)		0		0
Less: Net income from noncontrolling interests		1,690,000,000		285,000,000		491,000,000
Wells Fargo comprehensive income	19,652,000,000		4,882,000,000		24,259,000,000	

Going to the actual SEC interactive data rendering you see:

SEC Company Search for Wells Fargo: <https://www.sec.gov/edgar/browse/?CIK=66740>

SEC Filing Page for This Wells Fargo Report:

<https://www.sec.gov/Archives/edgar/data/66740/000006674022000010/0000066740-22-000010-index.htm>

Interactive data for this report: [https://www.sec.gov/cgi-](https://www.sec.gov/cgi-bin/viewer?action=view&cik=66740&accession_number=0000066740-22-000010&xbrl_type=v#)

[bin/viewer?action=view&cik=66740&accession_number=0000066740-22-000010&xbrl_type=v#](https://www.sec.gov/cgi-bin/viewer?action=view&cik=66740&accession_number=0000066740-22-000010&xbrl_type=v#)

Consolidated Statement of Income - USD (\$) shares in Millions, \$ in Millions	12 Months Ended		
	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2019
Income Statement [Abstract]			
Net sales	\$ 35,355	\$ 32,184	\$ 32,136
Operating expenses			
Cost of sales	18,795	16,605	17,136
Selling, general and administrative expenses	7,197	6,929	7,029
Research, development and related expenses	1,994	1,878	1,911
Gain on sale of businesses	0	(389)	(114)
Total operating expenses	27,986	25,023	25,962
Operating income	7,369	7,161	6,174
Other expense (income), net	165	366	531
Income before income taxes	7,204	6,795	5,643
Provision for income taxes	1,285	1,337	1,114
Income of consolidated group	5,919	5,458	4,529
Income (loss) from unconsolidated subsidiaries, net of taxes	10	(5)	0
Net income including noncontrolling interest	5,929	5,453	4,529
Less: Net income (loss) attributable to noncontrolling interest	8	4	12
Net income attributable to 3M	\$ 5,921	\$ 5,449	\$ 4,517

Actual 10-K as Inline XBRL:

https://www.sec.gov/ix?doc=/Archives/edgar/data/66740/000006674022000010/mmm-20211231.htm#i04254fc6fdb847859444e33430354842_70

3M Company and Subsidiaries
Consolidated Statement of Income
Years ended December 31

(Millions, except per share amounts)	2021	2020	2019
Net sales	\$ <u>35,355</u>	\$ <u>32,184</u>	\$ <u>32,136</u>
Operating expenses			
Cost of sales	<u>18,795</u>	<u>16,605</u>	<u>17,136</u>
Selling, general and administrative expenses	<u>7,197</u>	<u>6,929</u>	<u>7,029</u>
Research, development and related expenses	<u>1,994</u>	<u>1,878</u>	<u>1,911</u>
Gain on sale of businesses	<u>—</u>	<u>(389)</u>	<u>(114)</u>
Total operating expenses	<u>27,986</u>	<u>25,023</u>	<u>25,962</u>
Operating income	<u>7,369</u>	<u>7,161</u>	<u>6,174</u>
Other expense (income), net	<u>165</u>	<u>366</u>	<u>531</u>
Income before income taxes	<u>7,204</u>	<u>6,795</u>	<u>5,643</u>
Provision for income taxes	<u>1,285</u>	<u>1,337</u>	<u>1,114</u>
Income of consolidated group	<u>5,919</u>	<u>5,458</u>	<u>4,529</u>
Income (loss) from unconsolidated subsidiaries, net of taxes	<u>10</u>	<u>(5)</u>	<u>—</u>
Net income including noncontrolling interest	<u>5,929</u>	<u>5,453</u>	<u>4,529</u>
Less: Net income (loss) attributable to noncontrolling interest	<u>8</u>	<u>4</u>	<u>12</u>
Net income attributable to 3M	\$ <u>5,921</u>	\$ <u>5,449</u>	\$ <u>4,517</u>
Weighted average 3M common shares outstanding — basic	<u>579.0</u>	<u>577.6</u>	<u>571</u>
Earnings per share attributable to 3M common shareholders — basic	\$ <u>10.23</u>	\$ <u>9.43</u>	\$ <u>7.83</u>

The fundamental issue that is occurring can be seen by looking at the concept used to represent the line item “Income of consolidated group” which was:

us-gaap:IncomeLossFromContinuingOperationsIncludingPortionAttributableToNoncontrollingInterest

The concept can be seen using the Inline XBRL report or the interactive data viewer. Effectively what the filer has done was use the above concept to represent a subtotal which they arbitrarily put between the line items “Provision for income taxes” and “Income (loss) from unconsolidated subsidiaries, net of taxes.”

Income (Loss) from Continuing Operations, Net of Tax, Including Portion Attributable to Noncontrolling Interest	
Tag	us-gaap:IncomeLossFromContinuingOperationsIncludingPortionAttributableToNoncontrollingInterest
Fact	5,919,000,000
Period	12 months ending 12/31/2021
Measure	USD
Scale	Millions
Decimals	Millions
Balance	Credit
Sign	Positive

Correction of this inconsistency:

To correct this inconsistency, one of two things should occur:

1. The arbitrary line item which 3M chose to add, "Income from consolidated group" should have been represented by 3M creating an extension concept.
2. The US GAAP XBRL taxonomy could choose to add a concept that could be used to represent that arbitrary subtotal in XBRL-based financial reports.

If this report were compared to other reports that used this same reporting style one would see that many entities report this same information pattern without that arbitrary subtotal and other report the information pattern with the subtotal.

Income Statement (Abstract)	Period (Axis)			Income Statement (Line Items)	Period (Axis)		Concept	Period	2021-01-01 to 2021-12-31
	2021-01-01 to 2021-12-31	2020-01-01 to 2020-12-31	2019-01-01 to 2019-12-31		Value	Origin			
Income Statement [Abstract]				Net Income (Loss) [Build Up]			Net Income (Loss) [Build Up]		
Net sales	35,355,000,000	32,894,000,000	42,136,000,000	Income (Loss) From Continuing Operations After Tax [Build Up]			Income (Loss) From Continuing Operations After Tax [Build Up]		
Operating expenses				Income (Loss) From Continuing Operations Before Tax [Build Up]			Income (Loss) From Continuing Operations Before Tax [Build Up]		
Cost of sales	18,798,000,000	18,625,000,000	17,336,000,000	Operating Income (Loss) [Build Up]			Operating Income (Loss) [Build Up]		
Selling, general and administrative expenses	7,197,000,000	6,829,000,000	7,029,000,000	Revenues	35,355,000,000	FacIncomeLeaseRevenues[35,355,000,000]	Revenues	35,355,000,000	
Research, development and related expenses	1,994,000,000	1,878,000,000	1,921,000,000	Costs and Expenses	(18,798,000,000)	FacCostsAndExp[18,798,000,000]	Costs and Expenses	(18,798,000,000)	
Gain on sale of businesses	0	189,000,000	0	Operating Income (Loss) [Build Up]	16,557,000,000	FacIncomeLeaseOperatingIncome[16,557,000,000]	Operating Income (Loss)	16,557,000,000	
Total operating expenses	27,989,000,000	27,332,000,000	26,286,000,000	Nonoperating Income (Loss), Discontinued Operations Plus Income (Loss) From Equity Investments			Nonoperating Income (Loss) Plus Discontinued Operations	(165,000,000)	
Operating income	7,366,000,000	5,562,000,000	8,114,000,000	Income (Loss) From Continuing Operations Before Tax	16,557,000,000	FacIncomeLeaseOperatingIncome[16,557,000,000]	Income (Loss) From Continuing Operations Before Tax	16,557,000,000	
Other expense (income), net	155,000,000	(568,000,000)	(332,000,000)	Income (Loss) From Continuing Operations After Tax	1,289,000,000	FacIncomeLeaseOperatingIncome[1,289,000,000]	Income (Loss) From Continuing Operations After Tax	1,289,000,000	
Income before income taxes	7,211,000,000	4,994,000,000	7,782,000,000	Provision for income taxes	(1,922,000,000)	FacIncomeLeaseOperatingIncome[1,922,000,000]	Income Tax Expense (Benefit)	(1,922,000,000)	
Provision for income taxes	(1,922,000,000)	(1,332,000,000)	(1,448,000,000)	Income (Loss) From Continuing Operations After Tax	5,367,000,000	FacIncomeLeaseOperatingIncome[5,367,000,000]	Income (Loss) From Continuing Operations After Tax	5,367,000,000	
Income from unconsolidated subsidiaries, net of taxes	11,000,000	(2,000,000)	0	Income (Loss) From Discontinued Operations, Net of Tax			Income (Loss) From Discontinued Operations, Net of Tax	0	
Income (Loss) from unconsolidated subsidiaries, net of taxes	11,000,000	(2,000,000)	0	Income (Loss)	5,367,000,000	FacIncomeLeaseOperatingIncome[5,367,000,000]	Income (Loss)	5,367,000,000	
Net income including noncontrolling interest	5,929,000,000	4,420,000,000	4,929,000,000	Income (Loss) From Discontinued Operations, Net of Tax			Income (Loss) From Discontinued Operations, Net of Tax	0	
Less: Net income (loss) attributable to noncontrolling interest	8,000,000	4,000,000	17,000,000	Income (Loss)	5,367,000,000	FacIncomeLeaseOperatingIncome[5,367,000,000]	Income (Loss)	5,367,000,000	
Net income attributable to 3M	5,921,000,000	4,416,000,000	4,912,000,000	Extraordinary Items of Income (Expense), Net of Tax			Extraordinary Items of Income (Expense), Net of Tax	0	
				Net Income (Loss)	5,367,000,000	FacIncomeLeaseOperatingIncome[5,367,000,000]	Net Income (Loss)	5,367,000,000	