

25<sup>th</sup> XBRL EUROPE DIGITAL WEEK

**Online conference** 

15-18th June 2020



#### **DATA QUALITY**

- Pierre Hamon
- Etxetera
- XBRL France





What is quality?

What does a computer need to produce quality?

What have we already observed?

What can be done to avoid known potential errors in XBRL financial reports?



#### **High-quality product**

- what customers want
- in such a way that they actually use the product

**High quality Financial data** 

CONFORMITY
Accuracy
Completeness

Reliability Granularity

## Representing a report in iXBRL does not ensure the quality of the data

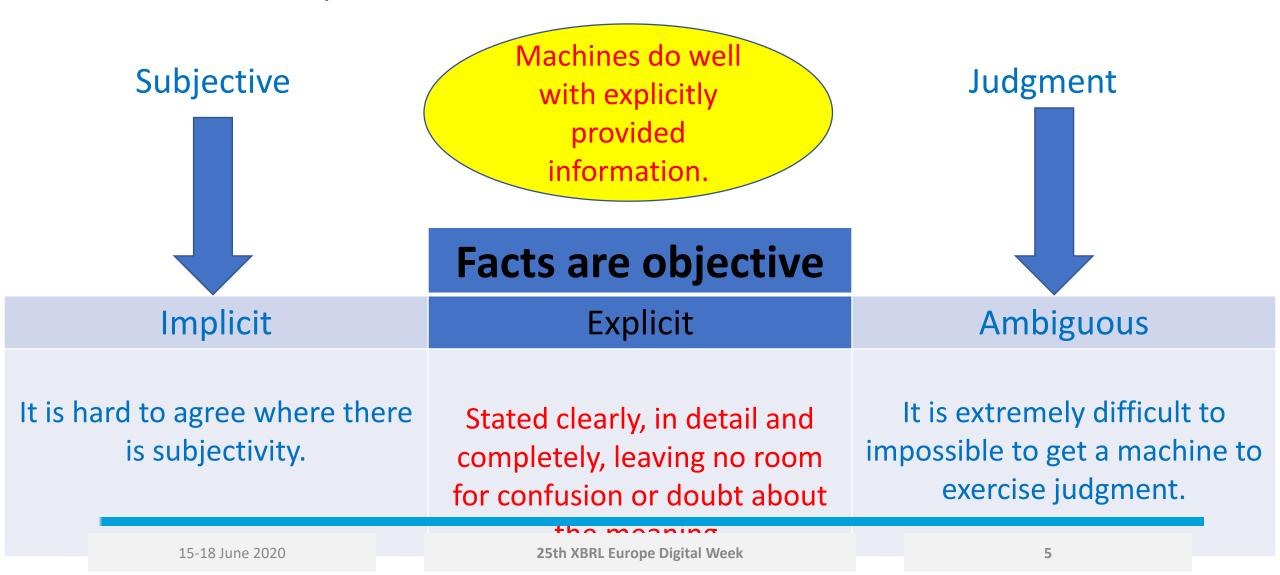
## What has changed?

"If I had asked people what they wanted, they would have said faster horses." Henry Ford

- Structured data exits for automated use.
- Accountants and other financial reporting players need to learn to work with computers and develop their digital skills.

- What's the point of a financial report in iXBRL if the preparer
  - doesn't understand the errors it contains
  - or if he doesn't even know the nature of the errors that may exist?

## How computers work?





# The different pieces of the puzzle

XBRL is the support of all parts but only their assembly leads to quality.



# The XBRL technical specification

You didn't get it?

No big deal, any good XBRL reporting software takes care of that



#### XBRL structures

You don't understand everything?
The software validates for compliance

but there are still few technicalities which it is necessary to become familiar with:

Concepts, Balance, Period, Tables, Axis, Members, Line Items, and Abstracts...

https://www.xbrl.org/guidance/xbrl-glossary/

#### **Entity-specific disclosure**

Disclosures included in a report that are specific to the reporting entity, or to a small number of reporting entities. Such disclosures require special handling in XBRL as it is not practical for the base taxonomy to include the concepts and dimension members needed to report all such disclosures for all entities. In order to facilitate the tagging of such disclosures, mechanisms such as entity-specific extension taxonomies may be used. Entity-specific disclosures are common in open reporting environments, but do not occur in closed reporting environments.

#### **Entity-specific extension taxonomy**

An extension taxonomy that is created by the prenation that is specific to the reasonable and the specific disclosure).

#### **Extension taxonomy**

A taxonomy that is constructed using or a starting point. Extension taxonomies author of the base taxonomy. Extension entity-specific extension taxonomy), pnomies (a base taxonomy) as by a different entity from the created by preparers (see by a collector making use of a ds body.

#### **Fact**

A fact is an Sept (e.g., and associating it with a number reporting a vanits, entity, period, other dimensions) that together uniquely of dimension

define a data submitted to a collector. This will include an XBRL report and such as an extension taxonomy.

#### Filing

The file or set actions and material usually provided in conjunction with filing helps preparers to create filings correctly. For example, this selecting concepts or the scope of the tagging that should be lication of filing guidance cannot be automatically validated, and needs the judgement of the preparer to apply.

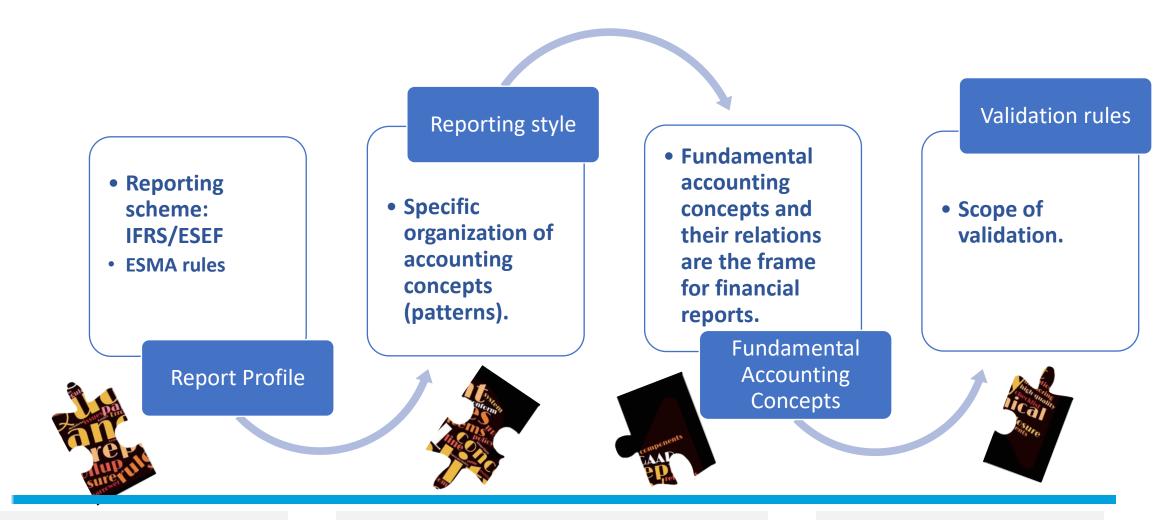
#### Filing rules

Validation rules that are driven by the technical requirements of the filing system in order to ensure interoperability. Examples of filing rules include specifying which versions and modules of the XBRL specifications may be used in filings, any applicable file size limits, restrictions on if and how extension taxonomies should be constructed. Filing rules will usually be enforced by the collector's submission system.

#### Inline XBRL

see indribite report. The terms infiline noric and indribite are used interchangeably.

## What can go wrong?



# ± 80 European companies report in IFRS

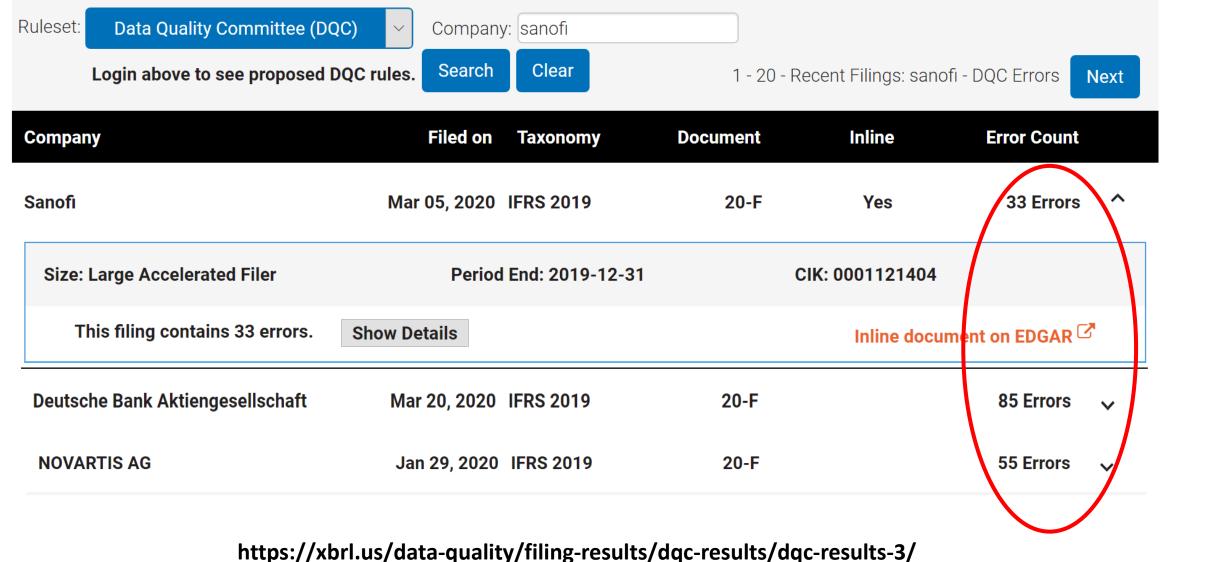
73 Classifiedbalance sheet45 Incomestatement byfunction

There are a wide variety of errors that could occur in the tagging of Financial statements that would impair the quality of the structured data.

Errors and inconsistencies in data tagging, in large part, result from:

- Absence of unambiguous guidance for using the ESEF/IFRS taxonomy.
- Lack of corporate awareness of errors in their filings.

The quality and usability of XBRL data is primarily determined by the quality of the tagging of the data.





InvestmentsInSubsidiariesJointVentures
AndAssociates
The amount of investments in
subsidiaries, joint ventures and
associates in an entity's separate
financial statements.

## Reporting profile

The set of accounting principles commonly referred to as a reporting scheme:



- Base taxonomy: ESEF/IFRS
- ESMA articulates its rules in the ESEF reporting manual.



## Reporting style

The reporting style is the specific organization of basic accounting concepts in the report.



 The organization of the report must be consistent with the reporting style used, according to the IFRS schemes.

### Styles in IFRS taxonomy

- 101-Balance Sheet, Classified (BSC) Balance Sheet, Classified [Table] Balance Sheet [Line Items] Assets [Roll Up] Current Assets Noncurrent Assets Assets Liabilities and Equity [Roll Up] Liabilities [Roll Up] Current Liabilities Noncurrent Liabilities
  - Liabilities Equity [Roll Up]
    - Equity Attributable to Parent
    - Equity Attributable to Noncontrolling Interest
    - Equity
    - Liabilities and Equity

- 102-Balance Sheet, Unclassified (BSU) Balance Sheet, Unclassified [Table] Balance Sheet [Line Items] Assets [Roll Up]
  - Assets Liabilities and Equity [Roll Up]
    - Liabilities [Roll Up] Liabilities
    - Equity [Roll Up]
      - Equity Attributable to Parent
      - Equity Attributable to Noncontrolling Interest
      - Equity
      - Liabilities and Equity
  - 103-Balance Sheet, Net assets
  - Balance Sheet, Net assets [Table]
    - Balance Sheet [Line Items] Assets [Roll Up]
      - Assets Liabilities [Roll Up]
        - Liabilities
      - Net assets
    - (Roll Up)
      - Equity Attributable to Parent
      - Equity Attributable to Noncontrolling Interest

Consolidated Balance Sheets - EUR (€) € in Millions		Dec. 31, 2017
Assets		
Property, plant and equipment		€ 9,579
Goodwill		40,264
Other intangible assets		13,080
Investments accounted for using the equity method		2,863
Other non-current assets		3,364
Deferred tax assets		4,290
Non-current assets	_	73,440
Inventories		6,816
Accounts receivable		7,216
Other current assets		2,005
Cash and cash equivalents	[1]	10,315
Current assets	_	26,352
Assets held for sale or exchange		34
TOTAL ASSETS	_	99,826
EQUITY AND LIABILITIES		
Equity attributable to equity holders of Sanofi		58,089
Equity attributable to non-controlling interests		169
Total equity	_	58,258
Long-term debt		14,326

#### Block error

Failure to comply with the selected style leads to accounting errors:

. For example: The concept used does not correspond to the reference to IFRS or the definition included in taxonomy.

Ifrs-full:

ThanAssetsOr...

Ifrs-full: CurrentAssetsOther



# Fundamental accounting concepts

They are the "key stones" which hold a financial report together.



 The XBRL report must be consistent with the rules that verify the relationship between the basic accounting concepts of the style used.

### Misclassification error

Total liabilities	1,406,633	
Common shares	5,291	
Additional paid-in capital	39,918	Failure to comply with the
Retained earnings	17,454	• •
Common shares in treasury, at cost	(9)	fundamental accounting concepts
Equity classified as obligation to purchase common shares	0	relations leads to accounting
Accumulated other comprehensive income (loss), net of tax	520	errors.
Total shareholders equity	63,174	
Additional equity components	4,675	ifrs-full_OtherEquityInterest
Noncontrolling interests	250	• For example: TOTAL EQUITY =
Total equity	68,099	•
	∃ ifrs-full:EquityAttributa	EQUITY attributable to parent +
	ifrs-full:IssuedCapit	
	ifrs-full:SharePremi	Non controlling interests is not
	ifrs-full:TreasurySh	ares
	ifrs-full:OtherResen	Vallu
	ifrs-full:RetainedEa	nings
	ifrs-full:OtherEquity	
		ognisedInOtherCompre
45.40	ifrs-full:Noncontrolling	
15-18 June 2	ifrs-full:Equity	urope Digital Week 18

#### Misclassification error

3,381 Total equity Long-term liabilities Long-term financial liabilities 12,355 **Current financial liabilities** Trade payables 1.084 170 Current financial debt 20 Other financial liabilities Ifrs-full: rentLiabilities 1,274 Total current liabilities Other current liabilities Income tax provision 2,535 Other provisions Other current liabilities 303 Ifrs-full: OtherCurrentLiabilities 2,838 Total other current liabilities 4,112 Total liabilities € 19,848 Total equity and liabilities

Failure to comply with the fundamental accounting concepts relations leads to XBRL representation errors.

. For example: Other current liabilities is part of Current liabilities

AND

Total current liabilities is not reported it is in fact Current financial liabilities



#### Validation rules

The XBRL instance and the XBRL taxonomy MUST be checked for and proven consistent in terms of:



- Mathematical relations (roll ups, roll forwards, member aggregations),
- Extensions and anchoring,
- Any other accounting/reporting logic.

#### Extension error

Total operating expenses	(311,749)
Operating income	43,303
Share of profit from associated companies	802
Interest income	140
Interest expense	(40,109)
Fair value gain on derivative financial liabilities	2,154
Other financial income/(expense)	443
Profit before tax	6,733
Income tax expense	(131)
Profit for the year	6,602
Attributable to the owners of parent	\$ 6,602

Failure to look-up in the base taxonomy organization and relations can lead to unnecessary extensions.

ifrs\_Profit(loss)

For example: a specific entity disclosure (extension) has being created. The concentrations

For example: a specific entity disclosure (extension) has being created. The concept exist under another name in the IFRS taxonomy

			·
Consolidated income statements -		12 Months Ende	
DKK (kr) kr in Thousands	Dec. 31, 2019	Dec. 31, 2018 [1]	
Consolidated income statements			
Revenue	kr 41,333	kr 37,977	• Ta
Royalty expenses	(415)	(3,356)	er
Research and development expenses	(561,423)	(438,219)	Cit
Administrative expenses	(67,881)	(43,543)	
Other operating income	444	1,099,526	
Operating result	(587,942)	652,385	
Financial income	14,655	9,988	
Financial expenses	(3,390)	(37,322)	
Result before tax	(576,677)	625,051	
Income tax	5,136	(43,773)	• Fo
Net result for the year	ki (57 1,54 I)	kr 581,278	ca
E ' "   BIZIZ		itre-tull	·Drofitl occRefor

## Tagging errors

- Tagging errors result in *Mathematical* errors in the XBRL representation of a fact.
  - For example, providing a value for a fact that is NEGATIVE when it should be POSITIVE.
  - Rounding errors.
- For example: wrong sign and wrong calculation

ifrs-full:ProfitLossBeforeTax	025 051 000	-5/0 0// 000	
ifrs-full:CurrentTaxExpenseIncome	43 773 000	-5 136 000	
ifrs-full:ProfitLoss	581 278 000	-571 541 000	

Equity at end of period at Dec. 31, 2018	30,669,000,000	10,640,000,000	16,859,000,000	€ 33,249,000,000
Equity at end of period (in shares) at Dec. 31, 2018				2,660,056,599
Effect of IFRS application	2,000,000			€ 2,000,000
Balance after effect of IFRS application	30,671,000,000	10,640,000,000	16,859,000,000	33,251,000,000
Consolidated comprehensive income	3,075,000,000		·	3,307,000,000
Share-based compensation	52,000,000			55,000,000
Purchase of treasury shares	(34,000,000)			(34,000,000)
Dividends	(1,857,000,000)			(2,105,000,000)
Subordinated notes remuneration	(297,000,000)			(297,000,000)
Changes in ownership interests with no gain/loss of control	4,000,000			5,000,000
Changes in ownership interests with gain/loss of control				2,000,000
Other movements	114,000,000			233,000,063
Equity at end of period at Dec. 31, 2019	€ 31,727,000,000	€ 10,640,226,396	€ 16,859,000,000	€ 34,416,000,000
Equity at end of period (in shares) at Dec. 51, 2019				2,660,056,599

н			
	Consolidated net income	3,226	
	Net income attributable to owners of the parent company	3,006	
	Non-controlling interests	€ 220	
	Earnings per share [abstract]		
	Net income of continuing operations - basic (in euros per share)   € / shares	€ 1.03	
	Net income of continuing operations - diluted (in euros per share)   € / shares	1.02	
	Net income - basic (in euros per share)   € / shares	1.03	
	Net income - diluted (in euros per share)   e/ shares	€ 1.02	

# Scaling and datatype errors

- Tagging errors could also result in a wrong representation of a fact in XBRL.
  - For example, "Number of shares" presented in the statement of changes in equity and scaled as millions as the monetary values.
  - For example, "Earnings per share" defined as <u>decimal</u> instead of PerShare



#### **Human validation**

The final review of the report cannot be fully automated because the machines do not have all the necessary intelligence.

The final consistency review requires a human intervention.





#### Data quality

Mistakes that can be found by software

Good software can check specific items and show where, how, and why the XBRL tagging is not in compliance with the ESEF rules.

Errors that are beyond the reach of computers and warrant human review.
Requires the involvement of knowledgeable XBRL individuals



Knowledgeable person are individuals who understand

> the ESEF rules,

> the accounting disclosures,

> the intricacies of the XBRL itself,

and then are able to apply that experience to the XBRL document



## Questions or comments in the chat?

hamon.pierre@etxetera.com