Keeping track of MNEs through business group databases: The experience of Banco de Portugal

Ana Bárbara Pinto • Statistics Department

9th IFC Conference on Are post-crisis statistical initiatives completed? 30th and 31st August 2018





AGENDA

- DATA SOURCE
- THE BUSINESS GROUPS' DATABASE
- BRIEF CHARACTERIZATION OF THE DATABASE
- RELEVANCE OF MNES



Simplified Corporate Information

is the legal deposit of accounts

ANNEX A: reported by non financial companies



BANCO DE PORTUGAL

EUROSISTEMA

Related

parties







2. THE BUSINESS GROUPS' DATABASE | 2.1. ARCHITECTURE AND VISUALIZATION

' All Names and Tax IDs used are fictional and based in the Greek and Roman mythology



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All Names and Tax IDs used are fictional and based in the Greek and Roman mythology







- Non-resident entities are identified by Tax payer identification number (Tax ID), Name and Country.
- A check digit validation only applies for national tax payer numbers.

If it is not possible to unequivocally identify a non-resident entity, **manual quality control will apply**.

The algorithm compares the attributes of all non-resident entities and if¹:

Situation 1 Tax ID, Name and Country are equal

> The entity is considered the same



¹ All Names and Tax IDs used are fictional and based in the Greek and Roman mythology

The same non-resident entities is reported by different resident NFC.



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A check digit validation only applies for national tax payer numbers.

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The algorithm compares the attributes of all non-resident entities and if¹:

Situation 2

Country is the same & Tax ID is equal

Fuzzy lookup compares the name -> the same entity when similarity <u>> than 55%;</u>

EXAMPLE!

Name: FLORA SA France Tax ID: 96720542239

Name: FLORA SA Tax ID: 96720542239

Are compared as "**FLORASAFRANCE**" and "**FLORASA**" and considered <u>the same company</u>;

¹ All Names and Tax IDs used are fictional and based in the Greek and Roman mythology



The same non-resident entities is reported by different resident NFC.



Non-resident entities are identified by Tax payer identification number (Tax ID), Name and Country.



If it is not possible to unequivocally identify a non-resident entity, **manual quality control will apply**.

The algorithm compares the attributes of all non-resident entities and if¹:

Situation 2

Country is the same & Tax ID is different

Fuzzy lookup compares the tax payer identification number and the name (Tax ID, Name) -> similarity <u>> than 70%;</u>

EXAMPLE!

Name: Ares Corp. SA Tax ID: 70253621

Name: Ares SA Tax ID: AB7025321 (slightly different)

¹ All Names and Tax IDs used are fictional and based in the Greek and Roman mythology

Are compared as "**70253621AresCorpSA**" and "**AB7025321AresSA**" are considered <u>the same company</u>;



¹ All Names and Tax IDs used are fictional and based in the Greek and Roman mythology

The algorithm compares the attributes of all non-resident entities and if¹:

The same non-resident entities is

Name and Country.

national tax payer numbers.

will apply.

reported by different resident NFC.

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Participation involving reporting entity filed as indirect

The algorithm establishes the following hierarchy:

- Repeated participations are deleted
- Indirect participations where the reporting entity is identified are deleted
- Direct participations prevail over indirect participations
- Direct downward participations prevail over direct upward participations



If it is not possible to unequivocally identify a participation, **manual quality control will apply**.



The same participation reported by different resident companies

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UCI inconsistencies - companies tend to wrongly identify themselves as UCI

The **algorithm analyse** the chain of voting rights higher than 50% and go up into the group structure to find out the correct UCI

The UCI of the group will be **the company on the top of the control chain**

If it is not possible to unequivocally identify a UCI, **manual quality control will apply**.





2.3. THE IMPACT OF THE ALGORITHM AND THE MANUAL QUALITY CONTROL



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4. RELEVANCE OF MNES (2016)





All-resident enterprise group Domestically controlled enterprise group Foreign controlled enterprise group Non-group firms



Liabilities structure





CONCLUDING REMARKS

Improving the quality of business groups' data

- Close cooperation between statistical authorities at a national and international level
- Establishment of an effective framework to interchange data
- LEI mandatory for all entities operating in international markets (used as a key to identify non-resident entities)



THANK YOU FOR YOU ATTENTION

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