The data analysis and modelling were done with different datasets. Below, we explain the content of each column, separated by the different dataframe names/files.

## Raw data (data\_PR.csv)

#### CNPJ\_BASICO:

Company identification number (CNPJ), each company has a 14 number that uniquely identifies the company and its branch/headquarters. The "CNPJ\_BASICO" identifies the company and corresponds to the first 8 digits.

#### CNPJ\_ORDEM

Branch/headquarter identification number from Company identification number. Headquarters are assigned the number 0001, while branches are given the number associated with the branch (4 digits).

#### IDENTIFICADOR\_MATRIZ/FILIAL

Identifies if the company is the headquarter (1) or a branch (2)

#### NOME\_FANTASIA

The company's trade name

#### SITUACAO\_CADASTRAL

The current company status can be:

- 01 Null (the company is not considered valid)
- 2 Active
- 3 Suspended
- 4 Inapt
- 8 Defunct

## DATA\_SITUACAO\_CADASTRAL

Last date in which the company status changed.

#### DATA\_DE\_INICIO\_ATIVIDADE

Company's creation date

## CNAE\_FISCAL\_PRINCIPAL

The company's economical activity is given by a CNAE code. The number is structured such that the first 2 digits describe 21 general classes of economical activities.

State in which the company is located

#### **MUNICIPIO**

Town code in which the company is located

## CORREIO\_ELETRONICO

Email used to register the company

## NATUREZA\_JURIDICA

The company's legal entity type. It is given by a 4-number code

## CAPITAL\_SOCIAL\_DA\_EMPRESA

Self-declared company share capital in BRL (R\$)

## PORTE\_DA\_EMPRESA

The company size can be:

00 – Not informed

01 – Microbusiness

03 - Small

05 - Other

## Clean data

## base\_cnpj

Same as CNPJ\_BASICO

## company\_start\_date

Company's creation date

## company\_status

Same as SITUACAO\_CADASTRAL

#### company\_status\_date

Last date in which the company status changed.

#### town\_name

Town's name in which the company is located

## economical\_sector

Company economic sector (agriculture, industry and service)

## entity\_type

Legal entity type. We consider the most common ones (Empresário Individual, Sociedade Empresaria Limitada, Sociedade Simples Limitada, Sociedade Anonima Fechada)<sup>1</sup> and group all others into the "other" category.

## share\_capital

Self-declared company share capital in BRL (R\$)

## company\_size

Company size (Not informed, Microbusiness, Small, Other)

#### Headquarters

Is it the company headquarters: (1) yes, (0) no

## branch\_number

Branch number of the company (the headquarters is 1)

## branches\_state

Number of branches in PR state

## email\_provider

Email provider

# municipios.csv

ano

year

## sigla\_uf

state

## id\_municipio

Town's code using IBGE number

## **Populacao**

Number of habitants in each year

# municipio\_code.csv

# NAME\_MUNICIPIO

Town's name

# CODE\_SEF-MG

Internal government code

## **MUNICIPIO**

Town's code using the same number as the MUNICIPIO column