TP9

FRANCIS\_ENSAE

2025-03-22

#Importation des bases de données   
library(haven)  
library(tidyverse)

## ── Attaching core tidyverse packages ──────────────────────── tidyverse 2.0.0 ──  
## ✔ dplyr 1.1.4 ✔ readr 2.1.5  
## ✔ forcats 1.0.0 ✔ stringr 1.5.1  
## ✔ ggplot2 3.5.1 ✔ tibble 3.2.1  
## ✔ lubridate 1.9.4 ✔ tidyr 1.3.1  
## ✔ purrr 1.0.2   
## ── Conflicts ────────────────────────────────────────── tidyverse\_conflicts() ──  
## ✖ dplyr::filter() masks stats::filter()  
## ✖ dplyr::lag() masks stats::lag()  
## ℹ Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors

ehcvm\_welfare\_mli2018 <- read\_sav("C:/Users/Hp/Desktop/TP9\_R/ehcvm\_welfare\_mli2018.sav")  
View(ehcvm\_welfare\_mli2018)  
ehcvm\_welfare\_mli2021 <- read\_sav("C:/Users/Hp/Desktop/TP9\_R/ehcvm\_welfare\_mli2021.sav")  
View(ehcvm\_welfare\_mli2021)

#Verification de la structure des deux bases  
str(ehcvm\_welfare\_mli2018)

## tibble [6,602 × 34] (S3: tbl\_df/tbl/data.frame)  
## $ country : chr [1:6602] "MLI" "MLI" "MLI" "MLI" ...  
## ..- attr(\*, "label")= chr "Pays"  
## ..- attr(\*, "format.spss")= chr "A3"  
## ..- attr(\*, "display\_width")= int 7  
## $ year : num [1:6602] 2018 2018 2018 2018 2018 ...  
## ..- attr(\*, "label")= chr "Annee enquete"  
## ..- attr(\*, "format.spss")= chr "F9.0"  
## $ hhid : num [1:6602] 1001 1002 1003 1004 1005 ...  
## ..- attr(\*, "label")= chr "Idenfiant menage"  
## ..- attr(\*, "format.spss")= chr "F9.0"  
## $ grappe : dbl+lbl [1:6602] 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 2, ...  
## ..@ label : chr "Numero grappe"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num -1e+09  
## .. ..- attr(\*, "names")= chr "missing"  
## $ menage : num [1:6602] 1 2 3 4 5 6 7 8 9 10 ...  
## ..- attr(\*, "label")= chr "Numero menage"  
## ..- attr(\*, "format.spss")= chr "F10.0"  
## $ vague : num [1:6602] 1 1 1 1 1 1 1 1 1 1 ...  
## ..- attr(\*, "label")= chr "Vague"  
## ..- attr(\*, "format.spss")= chr "F9.0"  
## $ zae : dbl+lbl [1:6602] 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,...  
## ..@ label : chr "Zone agroecologique"  
## ..@ format.spss: chr "F9.0"  
## ..@ labels : Named num [1:5] 1 2 3 4 5  
## .. ..- attr(\*, "names")= chr [1:5] "Soudan" "Sahel" "Sahara" "Kidal" ...  
## $ region : dbl+lbl [1:6602] 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,...  
## ..@ label : chr "Region residence"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num [1:11] 1 2 3 4 5 6 7 8 9 10 ...  
## .. ..- attr(\*, "names")= chr [1:11] "Kayes" "Koulikoro" "Sikasso" "Ségou" ...  
## $ milieu : dbl+lbl [1:6602] 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 1, 1, 1, 1, 1, 1,...  
## ..@ label : chr "Milieu residence"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num [1:3] -1e+09 1e+00 2e+00  
## .. ..- attr(\*, "names")= chr [1:3] "missing" "Urbain" "Rural"  
## $ hhweight : num [1:6602] 645 645 645 645 645 ...  
## ..- attr(\*, "label")= chr "Ponderation menage"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ hhsize : num [1:6602] 1 10 8 6 8 13 4 10 7 10 ...  
## ..- attr(\*, "label")= chr "Taille menage"  
## ..- attr(\*, "format.spss")= chr "F10.0"  
## $ eqadu1 : num [1:6602] 1 7.38 6.1 4.59 6.05 ...  
## ..- attr(\*, "label")= chr "Nbr adultes-equiv. FAO"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ eqadu2 : num [1:6602] 1 5.24 4.18 3.4 4.18 ...  
## ..- attr(\*, "label")= chr "Nbr adultes-equiv. alt."  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ hgender : dbl+lbl [1:6602] 1, 1, 1, 1, 1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 2, 2, 2,...  
## ..@ label : chr "Genre du CM"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num [1:3] -1e+09 1e+00 2e+00  
## .. ..- attr(\*, "names")= chr [1:3] "missing" "Masculin" "F"  
## $ hage : num [1:6602] 36 63 51 42 22 53 36 51 46 45 ...  
## ..- attr(\*, "label")= chr "Age du CM"  
## ..- attr(\*, "format.spss")= chr "F9.0"  
## $ hmstat : dbl+lbl [1:6602] 3, 3, 3, 3, 1, 5, 2, 3, 3, 3, 2, 2, 2, 2, 2, 3, 2, 1,...  
## ..@ label : chr "Situation famille du CM"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num [1:8] -1e+09 1e+00 2e+00 3e+00 4e+00 ...  
## .. ..- attr(\*, "names")= chr [1:8] "missing" "C" "Mari" "Mari" ...  
## $ hreligion: dbl+lbl [1:6602] 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,...  
## ..@ label : chr "Religion du CM"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num [1:6] -1e+09 1e+00 2e+00 3e+00 4e+00 ...  
## .. ..- attr(\*, "names")= chr [1:6] "missing" "Musulman" "Chr" "Animiste" ...  
## $ hnation : dbl+lbl [1:6602] 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,...  
## ..@ label : chr "Nationalite du CM"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num [1:13] -1e+09 1e+00 2e+00 3e+00 4e+00 ...  
## .. ..- attr(\*, "names")= chr [1:13] "missing" "Benin" "Burkina Faso" "C" ...  
## $ halfab : dbl+lbl [1:6602] 1, 0, 1, 1, 1, 0, 1, 0, 0, 1, 0, 0, 1, 1, 1, 0, 0, 1,...  
## ..@ label : chr "Alphabetisation du CM"  
## ..@ format.spss: chr "F9.0"  
## ..@ labels : Named num [1:2] 0 1  
## .. ..- attr(\*, "names")= chr [1:2] "Non" "Oui"  
## $ heduc : dbl+lbl [1:6602] 1, 1, 3, 1, 6, 1, 1, 1, 1, 1, 3, 1, 1, 7, 3, 1, 1, 3,...  
## ..@ label : chr "Education du CM"  
## ..@ format.spss: chr "F37.0"  
## ..@ labels : Named num [1:7] 1 2 3 4 6 7 9  
## .. ..- attr(\*, "names")= chr [1:7] "Aucun" "Maternelle" "Fondamental 1" "Fondamental 2" ...  
## $ hdiploma : dbl+lbl [1:6602] 0, 0, 0, 0, 2, 0, 0, 0, 0, 0, 0, 0, 0, 4, 0, 0, 0, 0,...  
## ..@ label : chr "Diplome du CM"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num [1:12] -1e+09 0e+00 1e+00 2e+00 3e+00 ...  
## .. ..- attr(\*, "names")= chr [1:12] "missing" "Aucun" "CEP" "DEF/BEPC" ...  
## $ hhandig : dbl+lbl [1:6602] 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,...  
## ..@ label : chr "Handicap majeur CM"  
## ..@ format.spss: chr "F9.0"  
## ..@ labels : Named num [1:2] 0 1  
## .. ..- attr(\*, "names")= chr [1:2] "Non" "Oui"  
## $ hactiv7j : dbl+lbl [1:6602] 1, 1, 5, 1, 1, 5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 5, 5, 5,...  
## ..@ label : chr "Activite 7 jours du CM"  
## ..@ format.spss: chr "F19.0"  
## ..@ labels : Named num [1:6] 1 2 3 4 5 6  
## .. ..- attr(\*, "names")= chr [1:6] "Occupe" "Chomeur" "TF cherchant emploi" "TF cherchant pas" ...  
## $ hactiv12m: dbl+lbl [1:6602] 1, 1, 3, 1, 1, 3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 3, 3, 3,...  
## ..@ label : chr "Activite 12 mois du CM"  
## ..@ format.spss: chr "F14.0"  
## ..@ labels : Named num [1:4] 1 2 3 4  
## .. ..- attr(\*, "names")= chr [1:4] "Occupe" "Trav. fam." "Non occupe" "Moins de 5 ans"  
## $ hbranch : dbl+lbl [1:6602] 9, 1, NA, 1, 1, NA, 1, 1, 1, 6, 1, 1, 4, ...  
## ..@ label : chr "Branche activite du CM"  
## ..@ format.spss: chr "F16.0"  
## ..@ labels : Named num [1:11] 1 2 3 4 5 6 7 8 9 10 ...  
## .. ..- attr(\*, "names")= chr [1:11] "Agriculture" "Elevage/peche" "Indust. extr." "Autr. indust." ...  
## $ hsectins : dbl+lbl [1:6602] 4, 3, NA, 3, 3, NA, 3, 3, 3, 3, 3, 3, 3, ...  
## ..@ label : chr "Secteur instit. du CM"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num [1:7] -1e+09 1e+00 2e+00 3e+00 4e+00 ...  
## .. ..- attr(\*, "names")= chr [1:7] "missing" "Etat/Collectivit" "Entreprise publique/ parapublique" "Entreprise Priv" ...  
## $ hcsp : dbl+lbl [1:6602] 2, 9, NA, 9, 9, NA, 9, 9, 9, 9, 9, 9, 9, ...  
## ..@ label : chr "CSP du CM"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num [1:11] -1e+09 1e+00 2e+00 3e+00 4e+00 ...  
## .. ..- attr(\*, "names")= chr [1:11] "missing" "Cadre sup" "Cadre moyen/agent de ma" "Ouvrier ou employ" ...  
## $ dali : num [1:6602] 370487 2100139 853781 797426 1020184 ...  
## ..- attr(\*, "label")= chr "Conso annuelle alim. menage"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ dnal : num [1:6602] 975834 1883006 993910 785702 2703077 ...  
## ..- attr(\*, "label")= chr "Conso annuelle non alim. menage"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ dtot : num [1:6602] 1346321 3983145 1847691 1583128 3723262 ...  
## ..- attr(\*, "label")= chr "Conso annuelle totale menage"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ pcexp : num [1:6602] 1484456 439182 254658 290927 513159 ...  
## ..- attr(\*, "label")= chr "Indicateur de bien-être"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ zref : num [1:6602] 269485 269485 269485 269485 269485 ...  
## ..- attr(\*, "label")= chr "Seuil pauvrete national"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ def\_spa : num [1:6602] 0.907 0.907 0.907 0.907 0.907 ...  
## ..- attr(\*, "label")= chr "Deflateur spatial"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ def\_temp : num [1:6602] 1.03 1.03 1.03 1.03 1.03 ...  
## ..- attr(\*, "label")= chr "Deflateur temporel"  
## ..- attr(\*, "format.spss")= chr "F9.2"

str(ehcvm\_welfare\_mli2021)

## tibble [6,143 × 44] (S3: tbl\_df/tbl/data.frame)  
## $ grappe : num [1:6143] 1 1 1 1 1 1 1 1 1 1 ...  
## ..- attr(\*, "label")= chr "grappe"  
## ..- attr(\*, "format.spss")= chr "F6.0"  
## $ menage : num [1:6143] 11 5 2 7 1 4 3 10 12 9 ...  
## ..- attr(\*, "label")= chr "Identifiant du ménage"  
## ..- attr(\*, "format.spss")= chr "F9.0"  
## $ country : chr [1:6143] "MLI" "MLI" "MLI" "MLI" ...  
## ..- attr(\*, "label")= chr "Pays"  
## ..- attr(\*, "format.spss")= chr "A3"  
## ..- attr(\*, "display\_width")= int 7  
## $ year : num [1:6143] 2021 2021 2021 2021 2021 ...  
## ..- attr(\*, "label")= chr "Annee enquete"  
## ..- attr(\*, "format.spss")= chr "F9.0"  
## $ hhid : num [1:6143] 1011 1005 1002 1007 1001 ...  
## ..- attr(\*, "label")= chr "Idenfiant menage"  
## ..- attr(\*, "format.spss")= chr "F9.0"  
## $ vague : num [1:6143] 1 1 1 1 1 1 1 1 1 1 ...  
## ..- attr(\*, "label")= chr "Vague"  
## ..- attr(\*, "format.spss")= chr "F9.0"  
## $ month : Date[1:6143], format: "2021-11-01" "2021-11-01" ...  
## $ zae : dbl+lbl [1:6143] 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,...  
## ..@ label : chr "Zone agroecologique"  
## ..@ format.spss: chr "F9.0"  
## ..@ labels : Named num [1:5] 1 3 5 7 9  
## .. ..- attr(\*, "names")= chr [1:5] "Soudan" "Sahel" "Mopti" "Kidal" ...  
## $ region : dbl+lbl [1:6143] 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,...  
## ..@ label : chr "Region residence"  
## ..@ format.spss: chr "F10.0"  
## ..@ labels : Named num [1:9] 1 2 3 4 5 6 7 8 9  
## .. ..- attr(\*, "names")= chr [1:9] "Kayes" "Koulikoro" "Sikasso" "Segou" ...  
## $ milieu : dbl+lbl [1:6143] 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 1, 1, 1, 1, 1, 1,...  
## ..@ label : chr "Milieu residence"  
## ..@ format.spss: chr "F6.0"  
## ..@ labels : Named num [1:2] 1 2  
## .. ..- attr(\*, "names")= chr [1:2] "Urbain" "Rural"  
## $ hhweight : num [1:6143] 761 761 761 761 761 ...  
## ..- attr(\*, "label")= chr "Ponderation menage"  
## ..- attr(\*, "format.spss")= chr "F10.2"  
## $ hhsize : num [1:6143] 12 9 9 6 2 6 6 11 4 6 ...  
## ..- attr(\*, "label")= chr "Taille menage"  
## ..- attr(\*, "format.spss")= chr "F6.0"  
## $ eqadu1 : num [1:6143] 8.49 6.84 6.93 3.77 2 ...  
## ..- attr(\*, "label")= chr "Nbr adultes-equiv. FAO"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ eqadu2 : num [1:6143] 5.98 5.02 4.71 3.25 1.61 ...  
## ..- attr(\*, "label")= chr "Nbr adultes-equiv. alt."  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ hgender : dbl+lbl [1:6143] 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,...  
## ..@ label : chr "Genre du CM"  
## ..@ format.spss: chr "F6.0"  
## ..@ labels : Named num [1:2] 1 2  
## .. ..- attr(\*, "names")= chr [1:2] "Masculin" "Féminin"  
## $ hage : num [1:6143] 34 79 66 40 39 51 52 50 45 54 ...  
## ..- attr(\*, "label")= chr "Age du CM"  
## ..- attr(\*, "format.spss")= chr "F9.0"  
## $ hmstat : dbl+lbl [1:6143] 3, 3, 3, 2, 2, 3, 2, 2, 2, 2, 2, 3, 2, 2, 3, 2, 3, 3,...  
## ..@ label : chr "Situation famille du CM"  
## ..@ format.spss: chr "F6.0"  
## ..@ labels : Named num [1:7] 1 2 3 4 5 6 7  
## .. ..- attr(\*, "names")= chr [1:7] "Célibataire" "Marié(e) monogame" "Marié(e) polygame" "Union libre" ...  
## $ hreligion : dbl+lbl [1:6143] 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,...  
## ..@ label : chr "Religion du CM"  
## ..@ format.spss: chr "F6.0"  
## ..@ labels : Named num [1:5] 1 2 3 4 5  
## .. ..- attr(\*, "names")= chr [1:5] "Musulman" "Chrétien" "Animiste" "Autre Réligion" ...  
## $ hnation : dbl+lbl [1:6143] 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1...  
## ..@ label : chr "Nationalite du CM"  
## ..@ format.spss: chr "F6.0"  
## ..@ labels : Named num [1:17] 1 2 3 4 5 6 7 8 9 10 ...  
## .. ..- attr(\*, "names")= chr [1:17] "Bénin" "Burkina Faso" "Cape-vert" "Cote d'ivoire" ...  
## $ hethnie : dbl+lbl [1:6143] 5, 5, 5, 5, 2, 5, 5, 5, 5, 5, 5, 5, 3, 5, 5, 5, 5, 5,...  
## ..@ label : chr "Ethnie du CM"  
## ..@ format.spss: chr "F6.0"  
## ..@ labels : Named num [1:23] 1 2 3 4 5 6 7 8 9 10 ...  
## .. ..- attr(\*, "names")= chr [1:23] "Bamanan/Bambara" "Malinke/Malinké" "Peulh" "Songhay/Sonrhai/Zarma" ...  
## $ halfa : dbl+lbl [1:6143] 1, 0, 0, 1, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0,...  
## ..@ label : chr "Alpha. lire/ecr. CM"  
## ..@ format.spss: chr "F9.0"  
## ..@ labels : Named num [1:2] 0 1  
## .. ..- attr(\*, "names")= chr [1:2] "Non" "Oui"  
## $ halfa2 : dbl+lbl [1:6143] 1, 0, 0, 1, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0,...  
## ..@ label : chr "Alpha. lire/ecr./comp. CM"  
## ..@ format.spss: chr "F9.0"  
## ..@ labels : Named num [1:2] 0 1  
## .. ..- attr(\*, "names")= chr [1:2] "Non" "Oui"  
## $ heduc : dbl+lbl [1:6143] 3, 1, 1, 3, 9, 1, 3, 1, 1, 1, 1, 1, 1, 1, 6, 1, 1, 1,...  
## ..@ label : chr "Education du CM"  
## ..@ format.spss: chr "F37.0"  
## ..@ labels : Named num [1:7] 1 2 3 4 6 7 9  
## .. ..- attr(\*, "names")= chr [1:7] "Aucun" "Maternelle" "Fondamental 1" "Fondamental 2" ...  
## $ hdiploma : dbl+lbl [1:6143] 0, 0, 0, 0, 10, 0, 0, 0, 0, 0, 0, 0, 0, ...  
## ..@ label : chr "Diplome du CM"  
## ..@ format.spss: chr "F6.0"  
## ..@ labels : Named num [1:11] 0 1 2 3 4 5 6 7 8 9 ...  
## .. ..- attr(\*, "names")= chr [1:11] "Aucun" "Certificat d'Etudes Primaires (CEP)" "Diplôme d'Etudes Fondamentales (DEF/BEPC)" "Certificat d'Aptitude Professionnelle (CAP)" ...  
## $ hhandig : dbl+lbl [1:6143] 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, 0, 0, 0, 0,...  
## ..@ label : chr "Handicap majeur CM"  
## ..@ format.spss: chr "F9.0"  
## ..@ labels : Named num [1:2] 0 1  
## .. ..- attr(\*, "names")= chr [1:2] "Non" "Oui"  
## $ hactiv7j : dbl+lbl [1:6143] 1, 3, 1, 1, 1, 1, 5, 1, 1, 5, 1, 1, 1, 5, 1, 1, 1, 5,...  
## ..@ label : chr "Activite 7 jours du CM"  
## ..@ format.spss: chr "F19.0"  
## ..@ labels : Named num [1:6] 1 2 3 4 5 6  
## .. ..- attr(\*, "names")= chr [1:6] "Occupe" "TF cherchant emploi" "TF cherchant pas" "Chomeur" ...  
## $ hactiv12m : dbl+lbl [1:6143] 1, 2, 1, 1, 1, 1, 3, 1, 1, 3, 1, 1, 1, 3, 1, 1, 1, 3,...  
## ..@ label : chr "Activite 12 mois du CM"  
## ..@ format.spss: chr "F14.0"  
## ..@ labels : Named num [1:4] 1 2 3 4  
## .. ..- attr(\*, "names")= chr [1:4] "Occupe" "Trav. fam." "Non occupe" "Moins de 5 ans"  
## $ hbranch : dbl+lbl [1:6143] 1, 5, 1, 7, 9, 1, NA, 1, 1, NA, 1, 1, 4, N...  
## ..@ label : chr "Branche activite du CM"  
## ..@ format.spss: chr "F18.0"  
## ..@ labels : Named num [1:11] 1 2 3 4 5 6 7 8 9 10 ...  
## .. ..- attr(\*, "names")= chr [1:11] "Agriculture" "Elevage/syl./peche" "Indust. extr." "Autr. indust." ...  
## $ hsectins : dbl+lbl [1:6143] 3, 3, 3, 3, 3, 3, NA, 3, 3, NA, 3, 3, 3, N...  
## ..@ label : chr "Secteur instit. du CM"  
## ..@ format.spss: chr "F6.0"  
## ..@ labels : Named num [1:6] 1 2 3 4 5 6  
## .. ..- attr(\*, "names")= chr [1:6] "Etat/Collectivités locales" "Entreprise publique/ parapublique" "Entreprise Privée" "Entreprise associative" ...  
## $ hcsp : dbl+lbl [1:6143] 9, 9, 9, 9, 1, 9, NA, 9, 5, NA, 9, 9, 9, N...  
## ..@ label : chr "CSP du CM"  
## ..@ format.spss: chr "F6.0"  
## ..@ labels : Named num [1:10] 1 2 3 4 5 6 7 8 9 10  
## .. ..- attr(\*, "names")= chr [1:10] "Cadre supérieur" "Cadre moyen/agent de maîtrise" "Ouvrier ou employé qualifié" "Ouvrier ou employé non qualifié" ...  
## $ dali : num [1:6143] 3446655 1275526 1131585 1064635 980620 ...  
## ..- attr(\*, "label")= chr "Conso annuelle alim. menage"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ dnal : num [1:6143] 1845095 2153507 1581007 1993139 2438837 ...  
## ..- attr(\*, "label")= chr "Conso annuelle non alim. menage"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ dtot : num [1:6143] 5291750 3429033 2712593 3057774 3419457 ...  
## ..- attr(\*, "label")= chr "Conso annuelle totale menage"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ pcexp : num [1:6143] 485149 419166 331589 560675 1880982 ...  
## ..- attr(\*, "label")= chr "Indicateur de bien-être"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ zref : num [1:6143] 277173 277173 277173 277173 277173 ...  
## ..- attr(\*, "label")= chr "Seuil pauvrete national"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ def\_spa : num [1:6143] 0.909 0.909 0.909 0.909 0.909 ...  
## ..- attr(\*, "label")= chr "Deflateur spatial"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ def\_temp : num [1:6143] 0.912 0.912 0.912 0.912 0.912 ...  
## ..- attr(\*, "label")= chr "Deflateur temporel"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ def\_temp\_prix2021m10: num [1:6143] 1 1 1 1 1 ...  
## ..- attr(\*, "label")= chr "temporal deflator for international poverty, 1 = 2021m10 prices"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ def\_temp\_cpi : num [1:6143] 0.973 0.973 0.973 0.973 0.973 ...  
## ..- attr(\*, "label")= chr "alternative temporal deflator based on official CPI, 2018/19 style"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ def\_temp\_adj : num [1:6143] 0.928 0.928 0.928 0.928 0.928 ...  
## ..- attr(\*, "label")= chr "temporal deflator adjusted for difference between hh and market survey periods"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ monthly\_cpi : num [1:6143] 118 118 118 118 118 ...  
## ..- attr(\*, "label")= chr "Monthly CPI value"  
## ..- attr(\*, "format.spss")= chr "F20.2"  
## $ cpi2017 : num [1:6143] 1.07 1.07 1.07 1.07 1.07 ...  
## ..- attr(\*, "label")= chr "adjustment factor for inflation between 2017 ICP year and base period for survey"  
## ..- attr(\*, "format.spss")= chr "F9.2"  
## $ icp2017 : num [1:6143] 205 205 205 205 205 ...  
## ..- attr(\*, "label")= chr "PPP exchange rate to USD based on 2017 ICP"  
## ..- attr(\*, "format.spss")= chr "F10.2"  
## $ dollars : num [1:6143] 5.02 4.33 3.43 5.8 19.45 ...  
## ..- attr(\*, "label")= chr "welfare in 2017 PPP USD per capita per day (not spatially deflated)"  
## ..- attr(\*, "format.spss")= chr "F9.2"

#Fusion des deux bases de données sur une colonne commune  
Welfare\_merged<-merge(ehcvm\_welfare\_mli2018,ehcvm\_welfare\_mli2021,by="hhid",all = TRUE)

#Vérification des doublons   
anyDuplicated(Welfare\_merged)

## [1] 0

## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

summary(cars)

## speed dist   
## Min. : 4.0 Min. : 2.00   
## 1st Qu.:12.0 1st Qu.: 26.00   
## Median :15.0 Median : 36.00   
## Mean :15.4 Mean : 42.98   
## 3rd Qu.:19.0 3rd Qu.: 56.00   
## Max. :25.0 Max. :120.00

## Including Plots

You can also embed plots, for example:



Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.