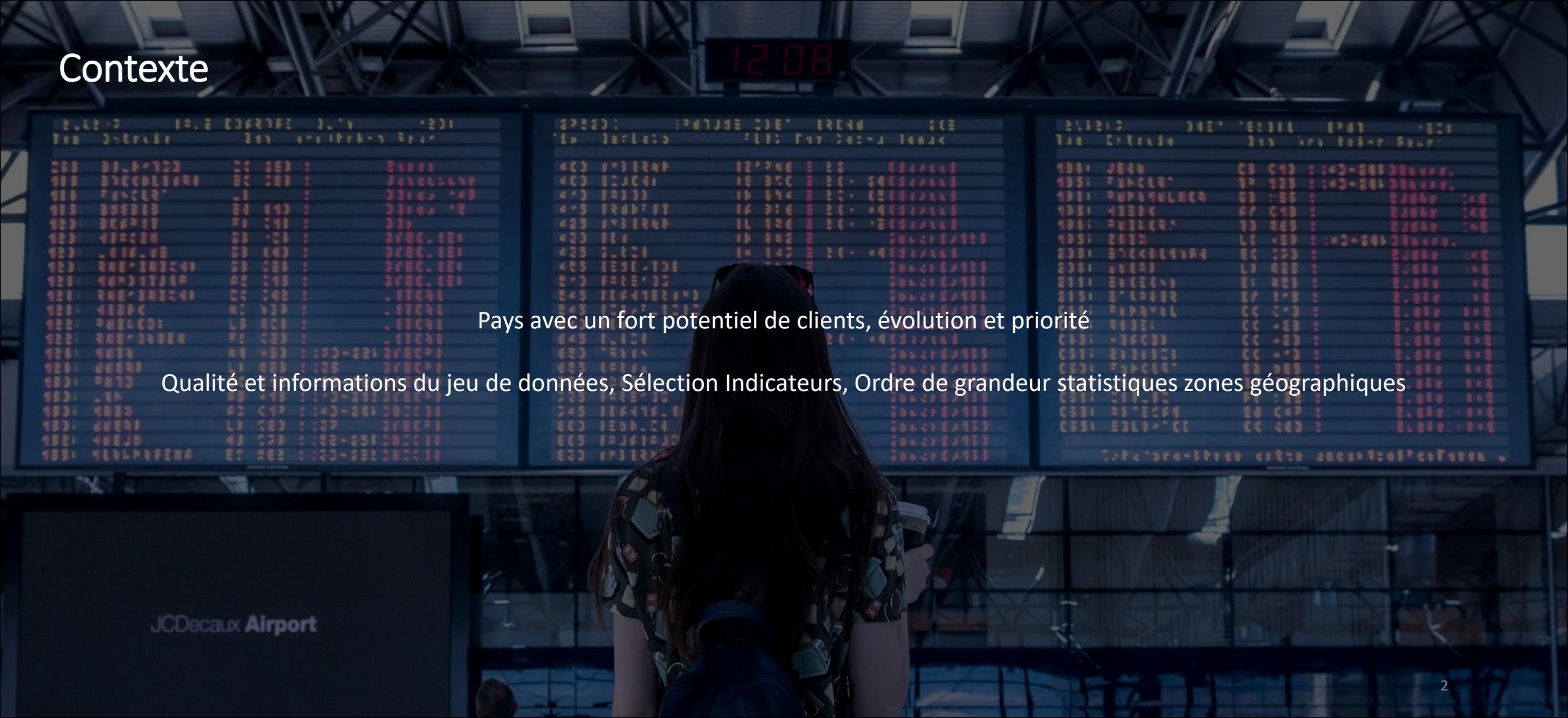




# Academy

# Contexte



Pays avec un fort potentiel de clients, évolution et priorité

Qualité et informations du jeu de données, Sélection Indicateurs, Ordre de grandeur statistiques zones géographiques

# Plan

1. Découverte des données
2. Sélection des indicateurs
3. Statistiques par régions
4. Classements et projections
5. Limites

Nettoyage des données

Itérations

# 1. Découverte des données

## Data et Series

Country, Foot Notes et Country Series

Source: The World Bank - *EdStats*

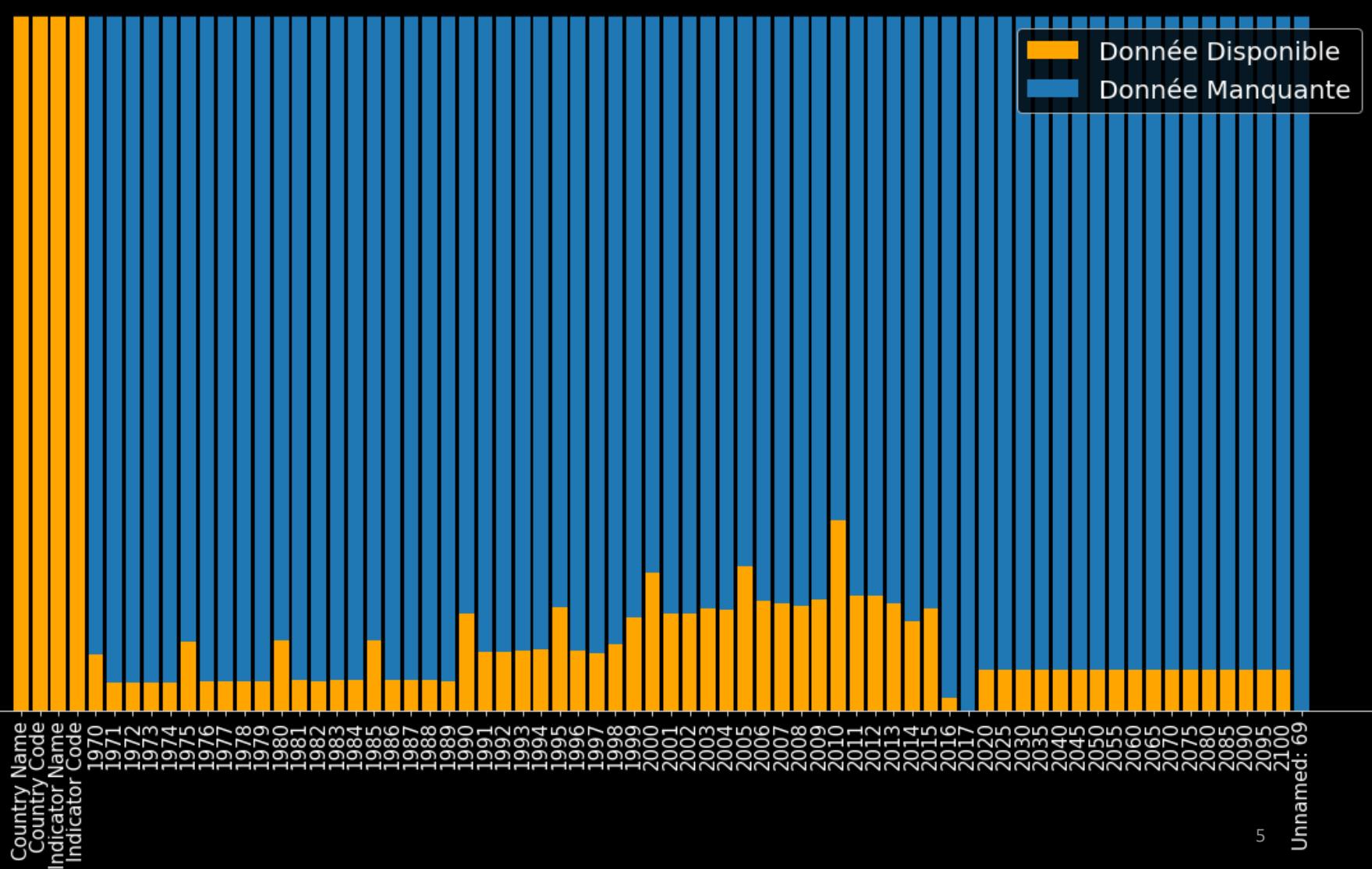
# 1. Data

2016, Projections

.melt()

Pas de doubles

es\_data données manquantes et données disponibles

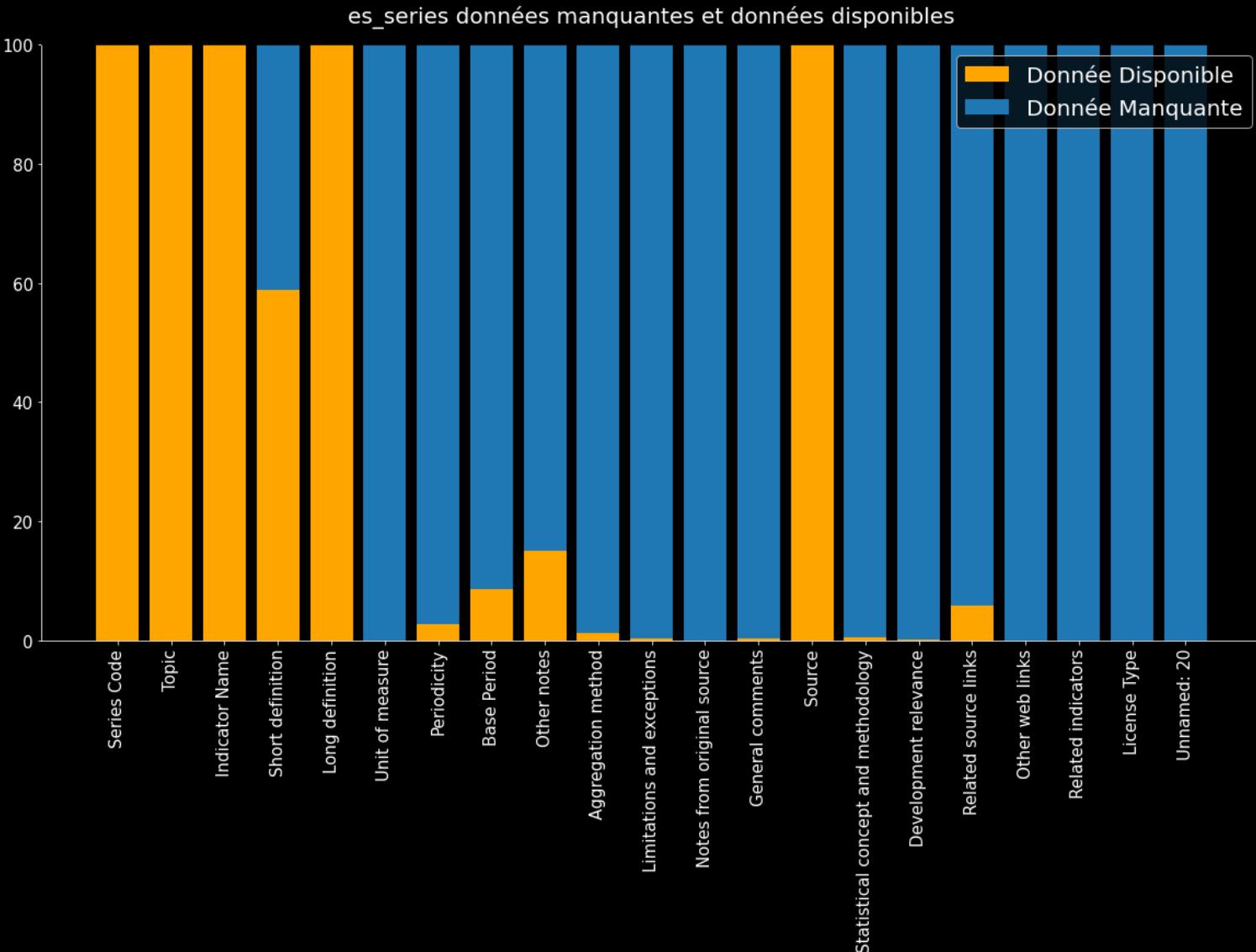


# 1. Series

Topic

Indicator Name

.merge()

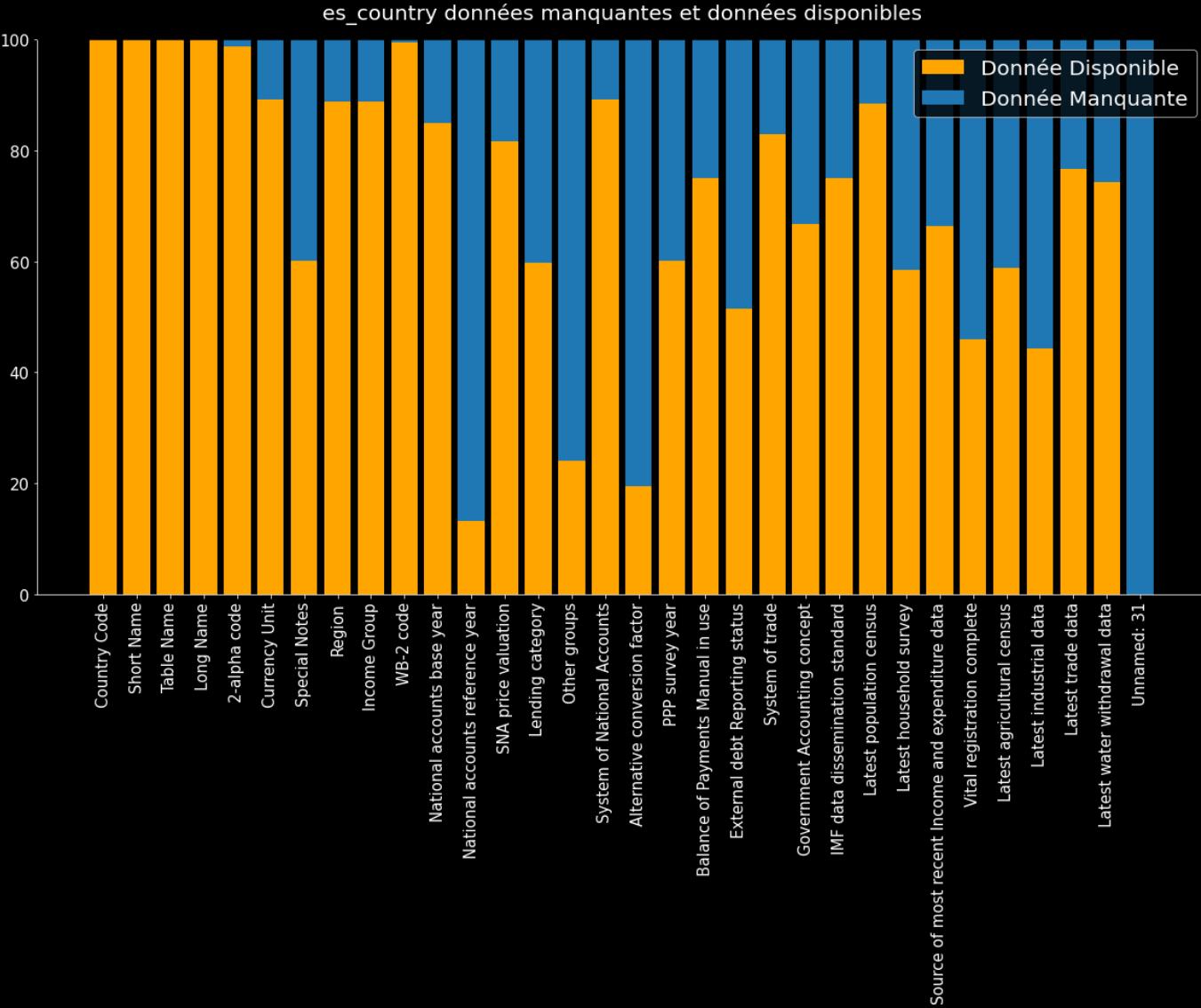


# 1. Countries

Agrégats

Statistiques Régions

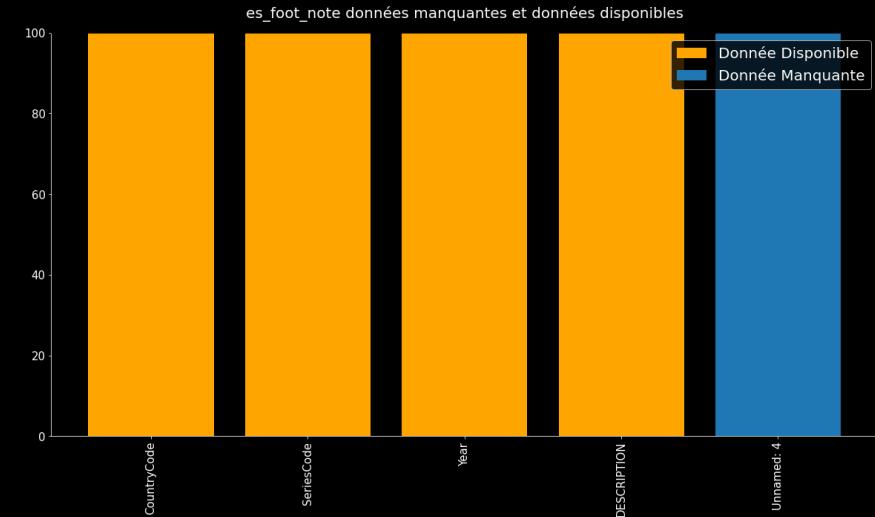
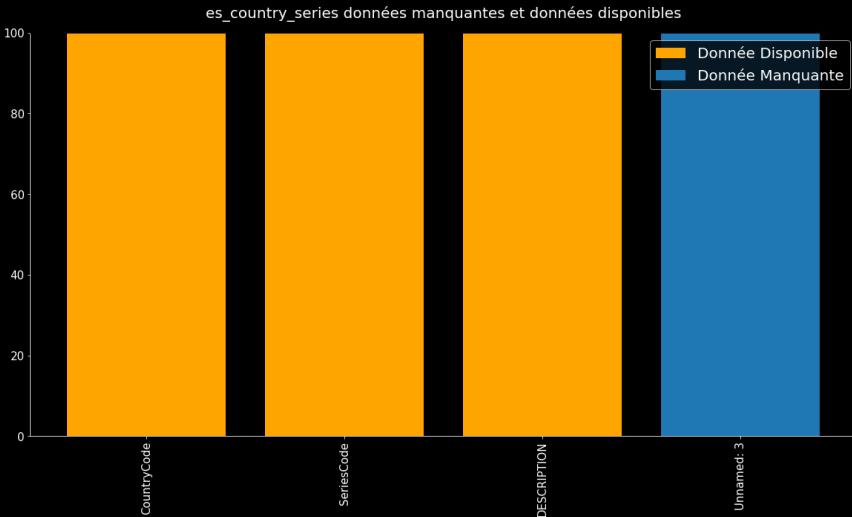
Comptabilité Nationale



# 1. Autres

Country Series

Foot Notes



## 2. Sélection des indicateurs

Demande (Education)

Faisabilité (Technologie)

Solvabilité (Richesse)

Profitabilité (Taille du marché)

## 2. Sélection des indicateurs

Expressions Régulières

*Tri intra-topics*

*Tri inter-topics*

Corrélations

## 2. Intra-topics

Technologie **Autres**

Infrastructures:

Communications

Education **Level**

Secondary ; Tertiary ;

Post-secondary ;

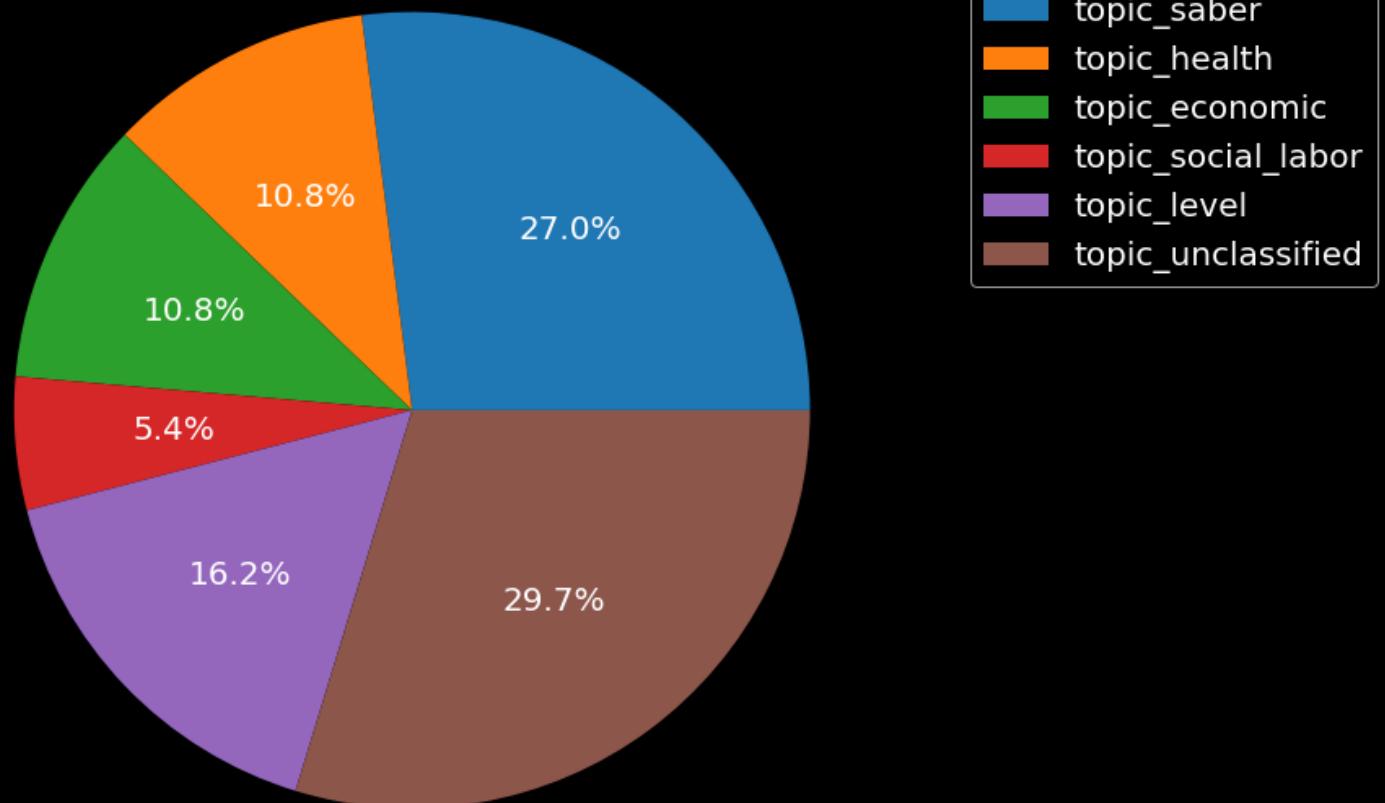
Attainment

Richesse **Economic**

Taille du marché **Health**

Population: Structure

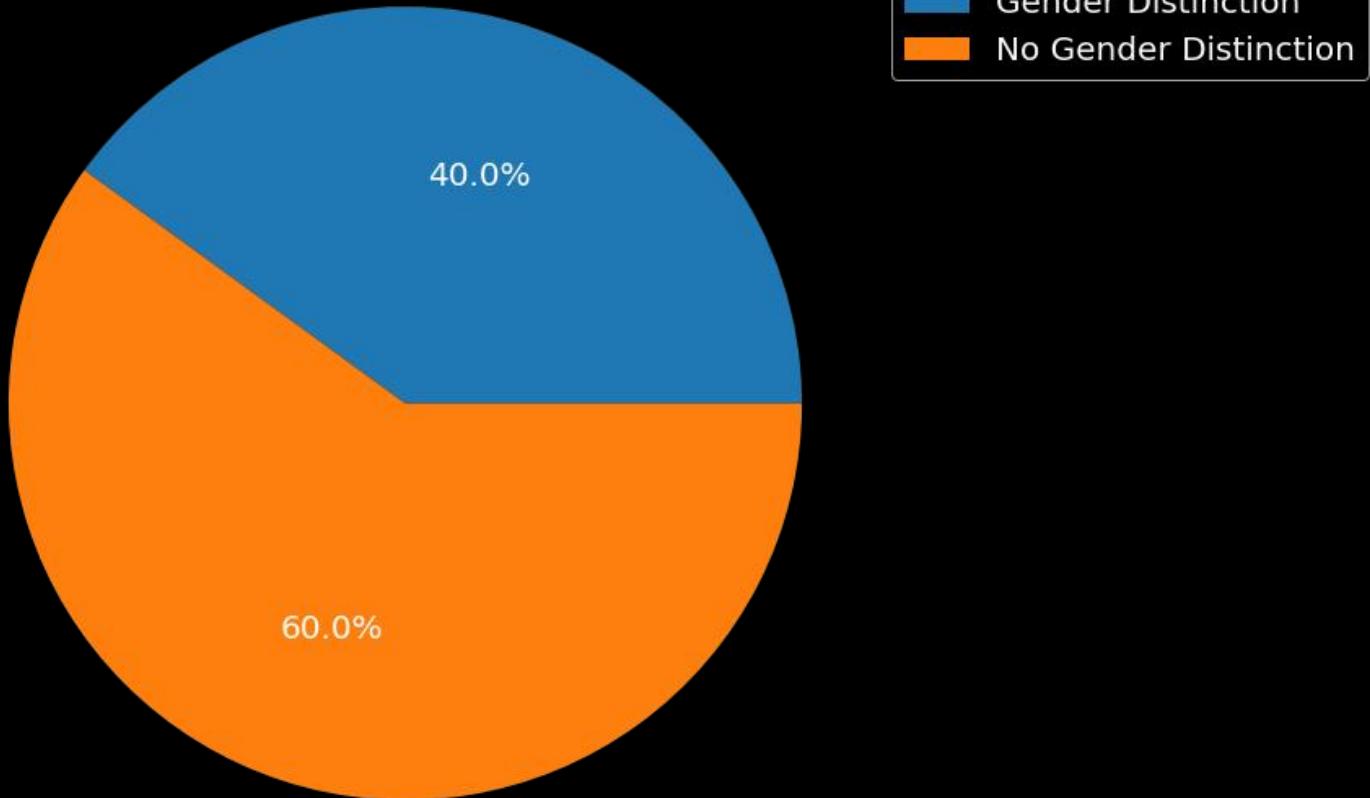
Pourcentage de Topics par groupes de Topics



## 2. Inter-topics

Distinction par genre

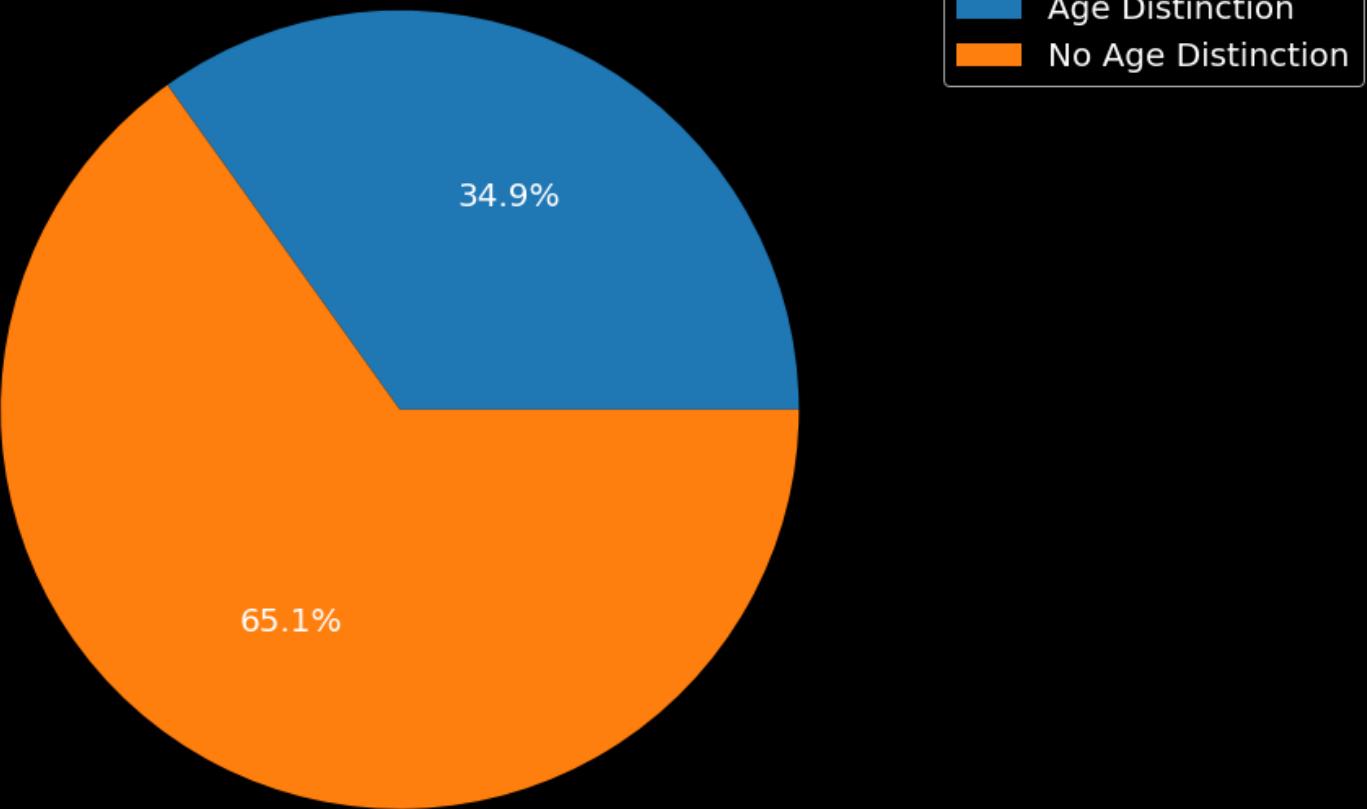
Répartition des indicateurs mentionnant une distinction de genre



## 2. Inter-topics

Par âge

Répartition des indicateurs mentionnant une distinction en fonction de l'âge

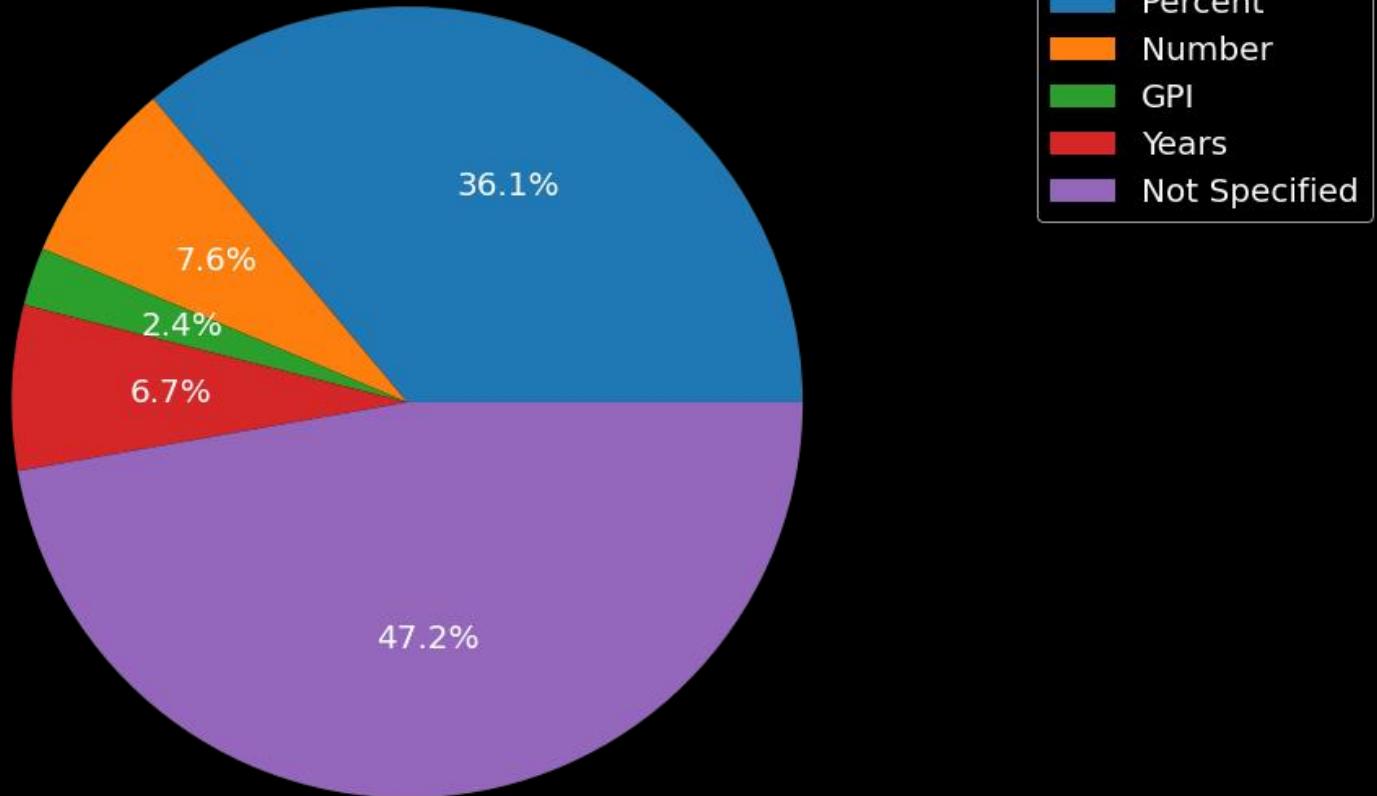


## 2. Inter-topics

Par unité de mesure

Number  
Percentages

Répartition des indicateurs en fonction de leur unité de mesure



## 2. Sélection des indicateurs

**15 Indicateurs**

**Essentiels :**

Economique ?

Enrolment Teritary  
Enrolment Upper Secondary

Internet Users

Population, total

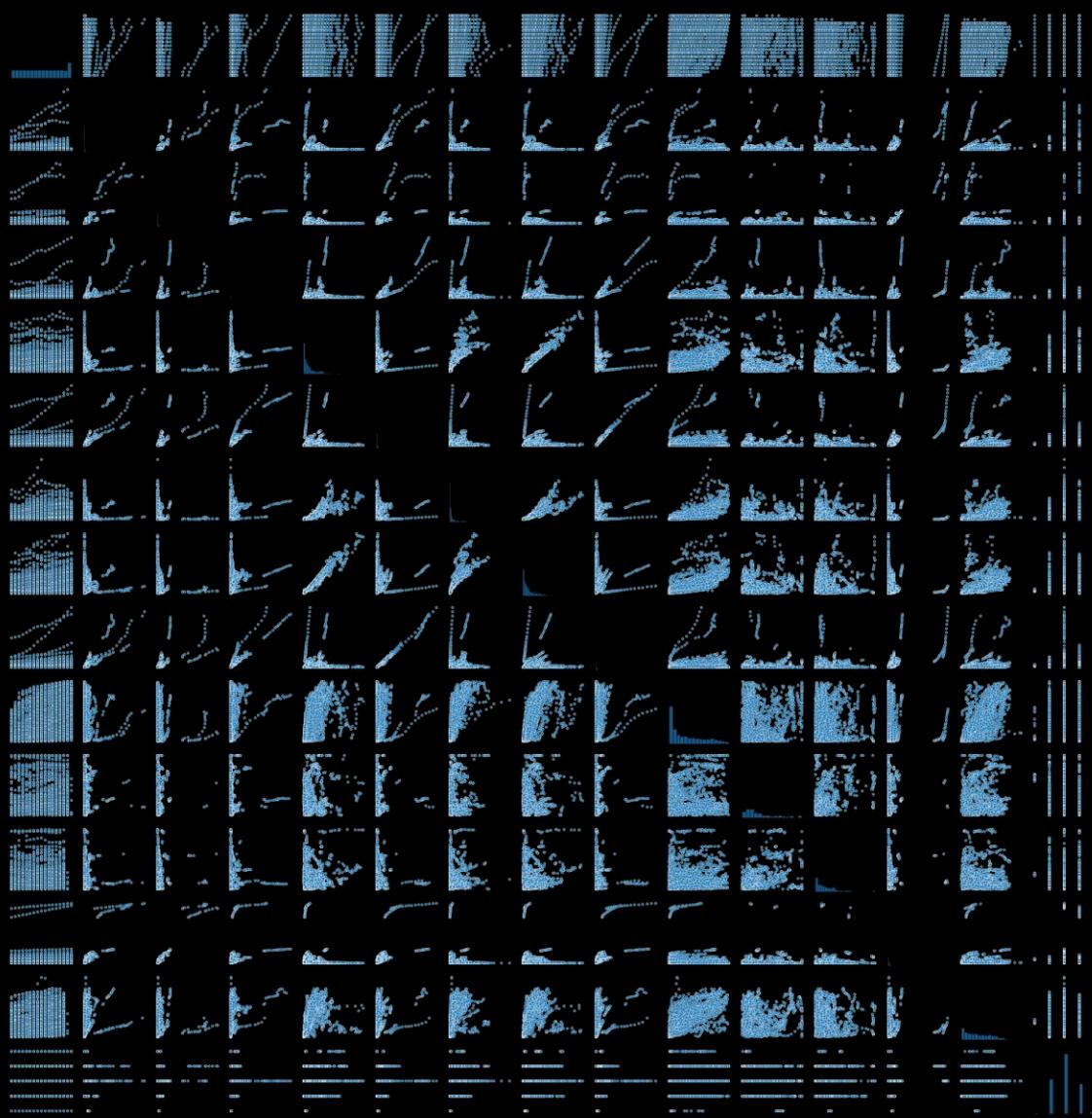
**Corrélations**

## 2. Outliers

[2000-2016]

Corrélation linéaire  
sensible

Chine, Inde, USA



## 2. Pearson

2011

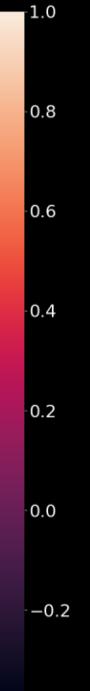
Inscriptions

Per Capita

Précisions

Enrolment in tertiary education, all programmes, both sexes (number)	1	0.87	0.47	0.02	0.67	0.028	0.061	0.69	0.021	-0.11	-0.17	0.8	0.15	-0.14
Enrolment in upper secondary education, both sexes (number)	0.87	1	0.77	0.12	0.82	0.24	0.2	0.81	0.15	-0.37	-0.087	0.93	0.33	0.099
GDP at market prices (current US\$)	-0.47	0.77	1	0.33	0.96	0.41	0.39	0.96	0.3	-0.24	-0.085	0.43	0.45	0.072
GDP per capita, PPP (constant 2011 international \$)	0.02	0.12	0.33	1	0.32	0.91	0.98	0.34	0.79	0.021	-0.095	-0.086	0.72	0.16
GDP, PPP (constant 2011 international \$)	0.67	0.82	0.96	0.32	1	0.4	0.39	1	0.3	-0.2	-0.094	0.57	0.29	0.034
GNI per capita, Atlas method (current US\$)	0.028	0.24	0.41	0.91	0.4	1	0.91	0.39	0.81	-0.075	-0.14	-0.049	0.68	0.16
GNI per capita, PPP (current international \$)	0.061	0.2	0.39	0.98	0.39	0.91	1	0.39	0.81	0.019	-0.19	-0.055	0.73	0.1
GNI, PPP (current international \$)	0.69	0.81	0.96	0.34	1	0.39	0.39	1	0.3	-0.2	-0.085	0.56	0.28	0.037
Internet users (per 100 people)	0.021	0.15	0.3	0.79	0.3	0.81	0.81	0.3	1	0.046	-0.22	-0.13	0.79	0.11
Percentage of enrolment in tertiary education in private institutions (%)	-0.11	-0.37	-0.24	0.021	-0.2	-0.075	0.019	-0.2	0.046	1	0.0089	-0.14	-0.082	-0.11
Percentage of enrolment in upper secondary education in private institutions (%)	-0.17	-0.087	-0.085	-0.095	-0.094	-0.14	-0.19	-0.085	-0.22	0.0089	1	0.0023	0.29	0.031
Population, total	0.8	0.93	0.43	-0.086	0.57	-0.049	-0.055	0.56	-0.13	-0.14	-0.0023	1	-0.17	-0.08
School life expectancy, tertiary, both sexes (years)	0.15	0.33	0.45	0.72	0.29	0.68	0.73	0.28	0.79	-0.082	-0.29	-0.17	1	0.21
Theoretical duration of upper secondary education (years)	-0.14	0.099	0.072	0.16	0.034	0.16	0.1	0.037	0.11	-0.11	0.031	-0.08	0.21	1

Enrolment in tertiary education, all programmes, both sexes (number)	1	0.87	0.47	0.02	0.67	0.028	0.061	0.69	0.021	-0.11	-0.17	0.8	0.15	-0.14
Enrolment in upper secondary education, both sexes (number)	0.87	1	0.77	0.12	0.82	0.24	0.2	0.81	0.15	-0.37	-0.087	0.93	0.33	0.099
GDP at market prices (current US\$)	-0.47	0.77	1	0.33	0.96	0.41	0.39	0.96	0.3	-0.24	-0.085	0.43	0.45	0.072
GDP per capita, PPP (constant 2011 international \$)	0.02	0.12	0.33	1	0.32	0.91	0.98	0.34	0.79	0.021	-0.095	-0.086	0.72	0.16
GDP, PPP (constant 2011 international \$)	0.67	0.82	0.96	0.32	1	0.4	0.39	1	0.3	-0.2	-0.094	0.57	0.29	0.034
GNI per capita, Atlas method (current US\$)	0.028	0.24	0.41	0.91	0.4	1	0.91	0.39	0.81	-0.075	-0.14	-0.049	0.68	0.16
GNI per capita, PPP (current international \$)	0.061	0.2	0.39	0.98	0.39	0.91	1	0.39	0.81	0.019	-0.19	-0.055	0.73	0.1
GNI, PPP (current international \$)	0.69	0.81	0.96	0.34	1	0.39	0.39	1	0.3	-0.2	-0.085	0.56	0.28	0.037
Internet users (per 100 people)	0.021	0.15	0.3	0.79	0.3	0.81	0.81	0.3	1	0.046	-0.22	-0.13	0.79	0.11
Percentage of enrolment in tertiary education in private institutions (%)	-0.11	-0.37	-0.24	0.021	-0.2	-0.075	0.019	-0.2	0.046	1	0.0089	-0.14	-0.082	-0.11
Percentage of enrolment in upper secondary education in private institutions (%)	-0.17	-0.087	-0.085	-0.095	-0.094	-0.14	-0.19	-0.085	-0.22	0.0089	1	0.0023	0.29	0.031
Population, total	0.8	0.93	0.43	-0.086	0.57	-0.049	-0.055	0.56	-0.13	-0.14	-0.0023	1	-0.17	-0.08
School life expectancy, tertiary, both sexes (years)	0.15	0.33	0.45	0.72	0.29	0.68	0.73	0.28	0.79	-0.082	-0.29	-0.17	1	0.21
Theoretical duration of upper secondary education (years)	-0.14	0.099	0.072	0.16	0.034	0.16	0.1	0.037	0.11	-0.11	0.031	-0.08	0.21	1



Enrolment in tertiary education, all programmes, both sexes (number)  
 Enrolment in upper secondary education, both sexes (number)  
 GDP at market prices (current US\$)  
 GDP per capita, PPP (constant 2011 international \$)  
 GDP, PPP (constant 2011 international \$)  
 GNI per capita, Atlas method (current US\$)  
 GNI per capita, PPP (current international \$)  
 Internet users (per 100 people)  
 Percentage of enrolment in tertiary education in private institutions (%)  
 Percentage of enrolment in upper secondary education in private institutions (%)  
 Population, total  
 School life expectancy, tertiary, both sexes (years)  
 Theoretical duration of upper secondary education (years)

## 2. Sélection des indicateurs – 9 Indicateurs finaux

### Essentiels

GNI per Capita PPP

Enrolment Tertiary  
Enrolment Upper Secondary

Internet Users

Population, total

### Précisions

Upper Secondary Private  
Tertiary Private

School life expectancy Tertiary  
Theoretical duration Upper Secondary

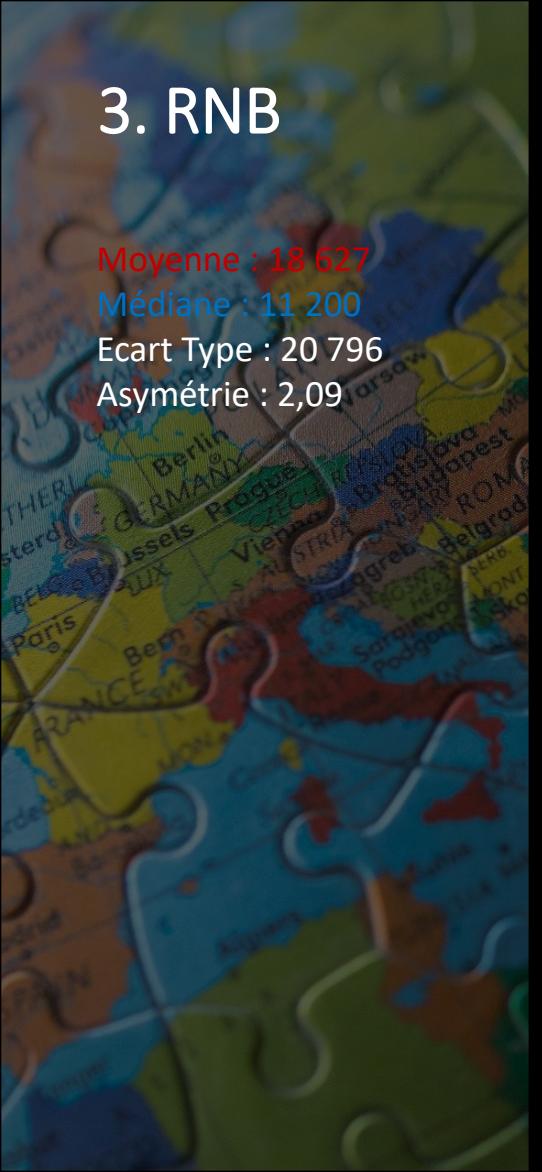
### 3. RNB

Moyenne : 18 627

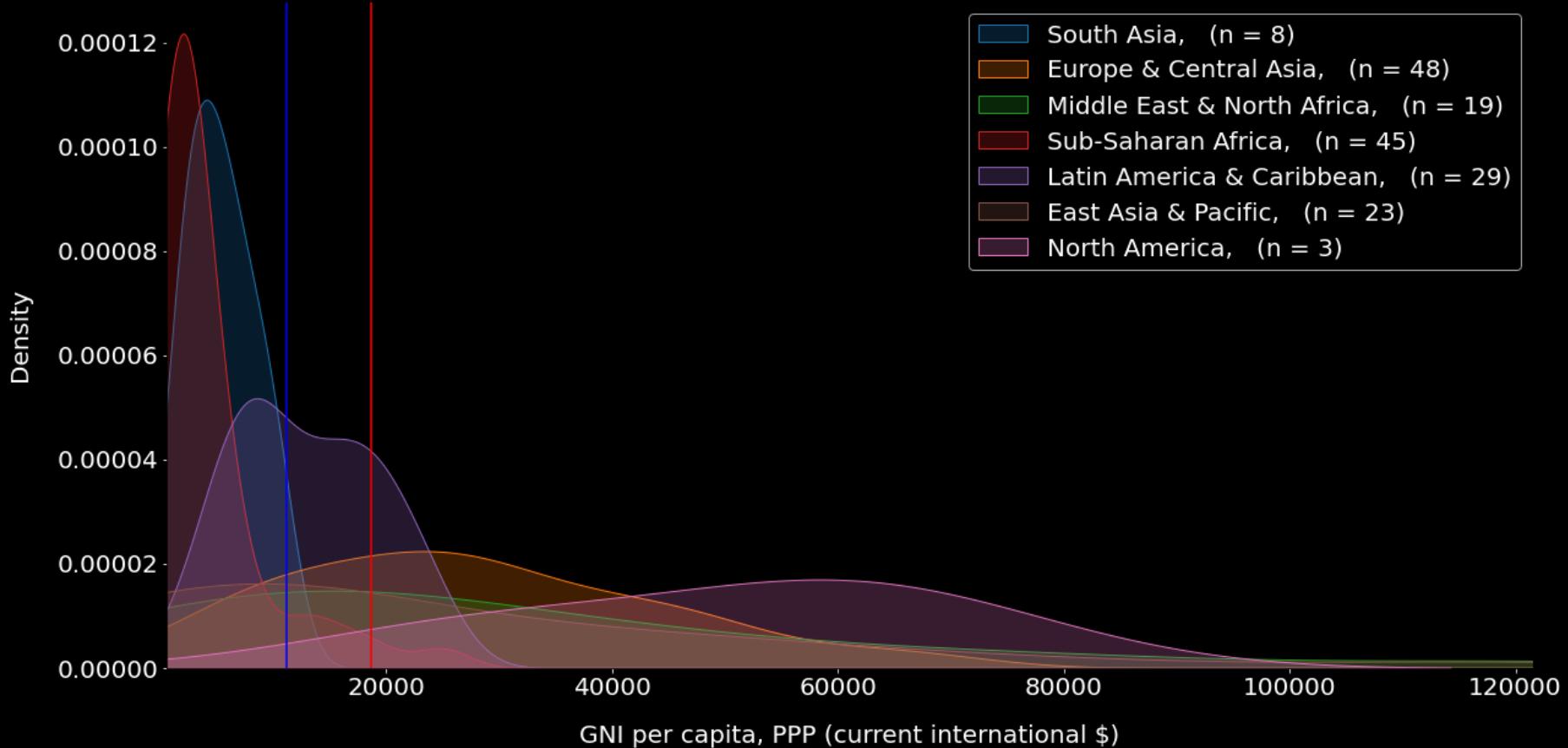
Médiane : 11 200

Ecart Type : 20 796

Asymétrie : 2,09



Distribution de GNI per capita, PPP (current international \$)



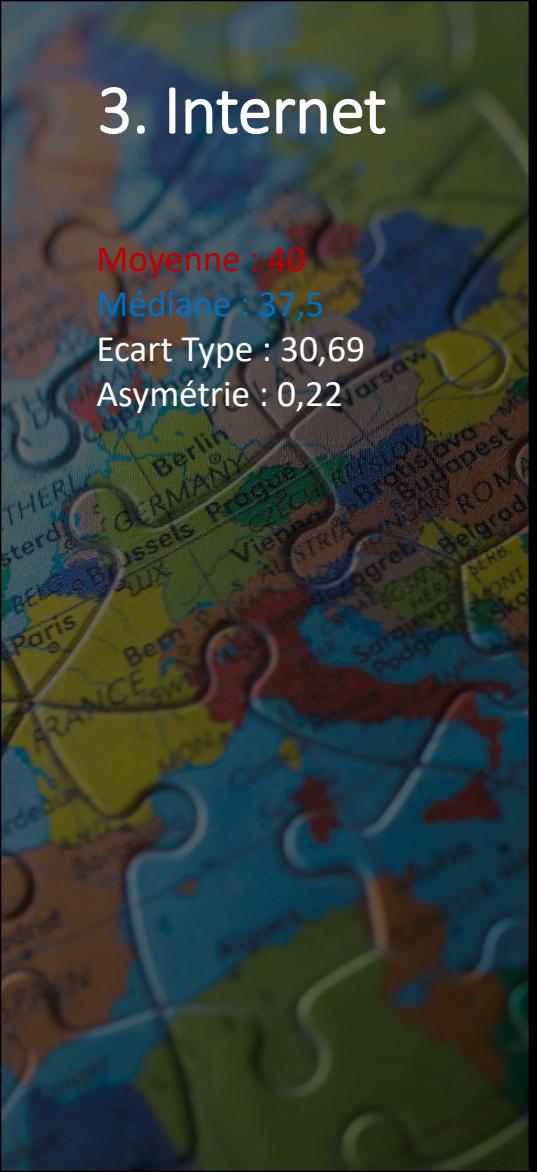
### 3. Internet

Moyenne : 40

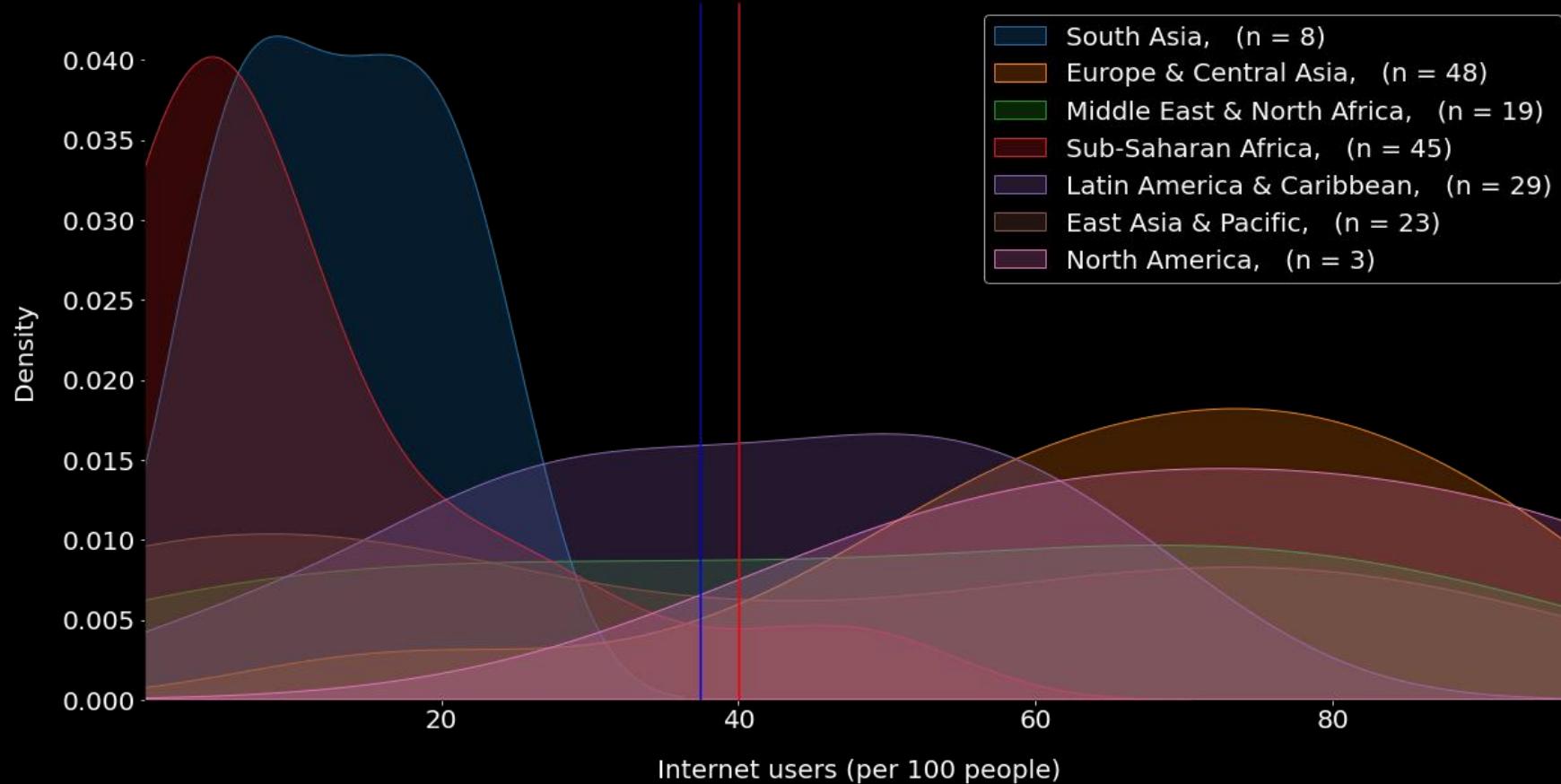
Médiane : 37,5

Ecart Type : 30,69

Asymétrie : 0,22



Distribution de Internet users (per 100 people)



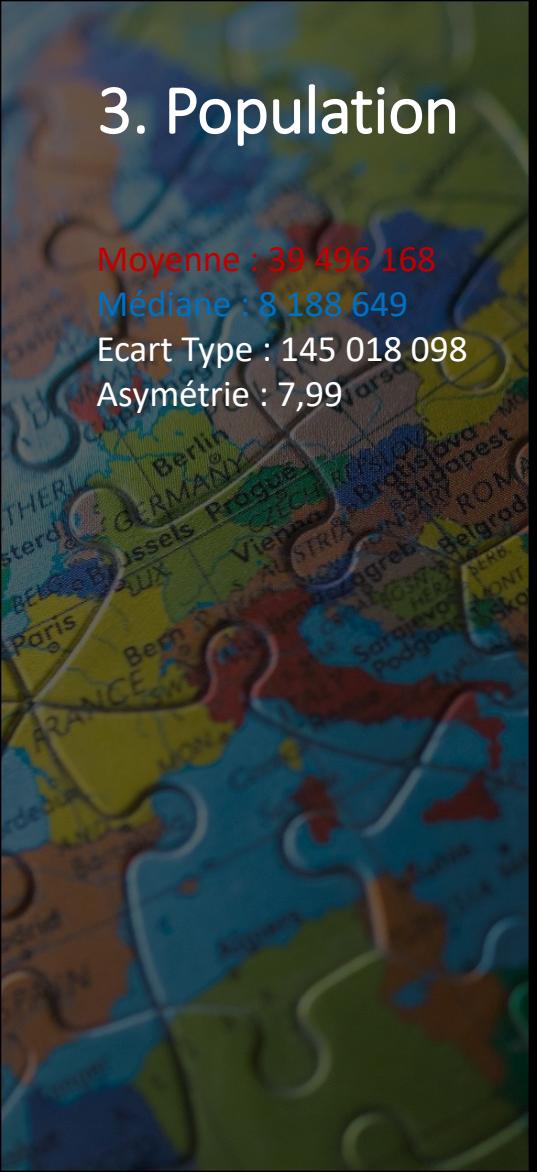
### 3. Population

Moyenne : 39 496 168

Médiane : 8 188 649

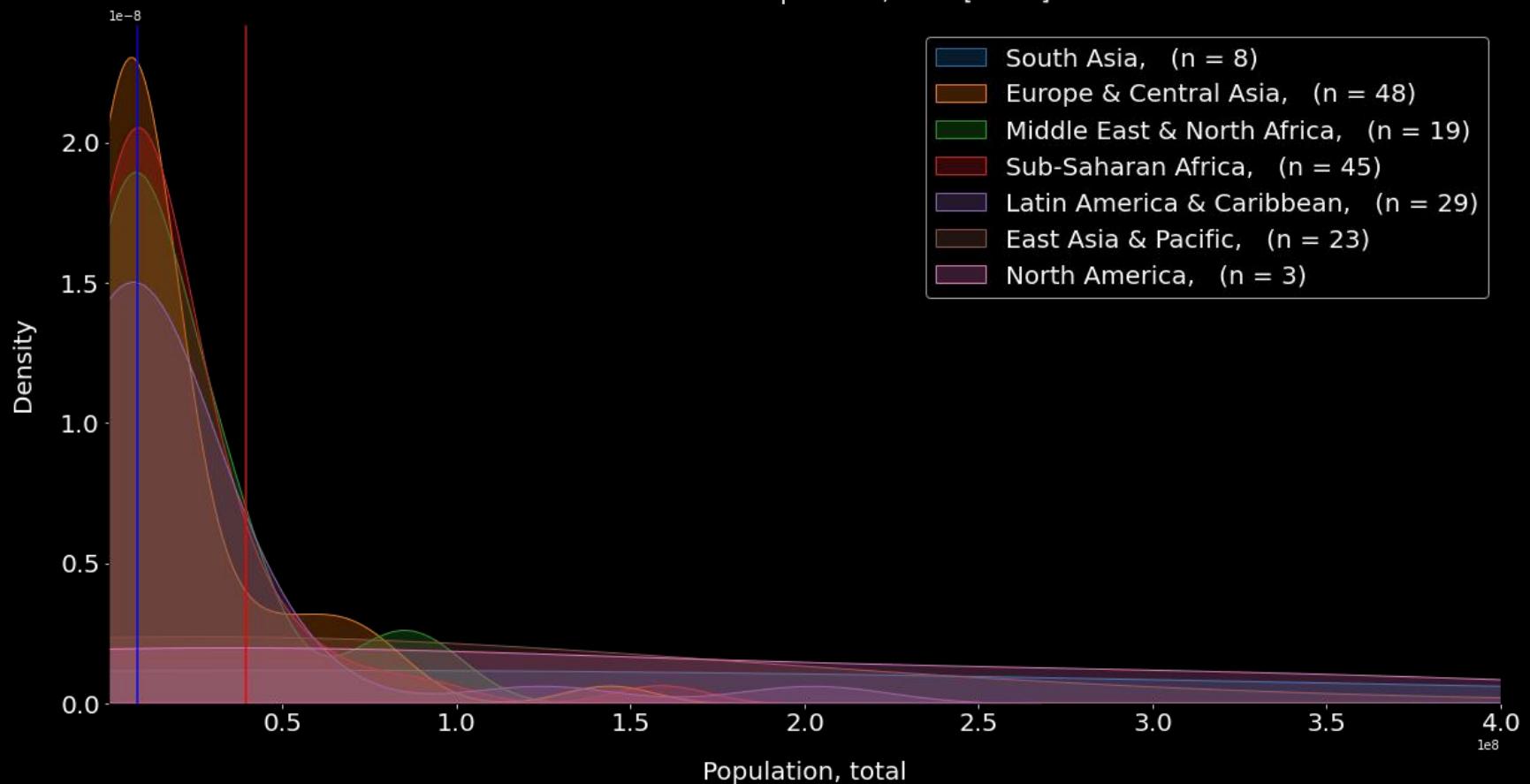
Ecart Type : 145 018 098

Asymétrie : 7,99



Distribution de Population, total [zoom]

South Asia, (n = 8)
Europe & Central Asia, (n = 48)
Middle East & North Africa, (n = 19)
Sub-Saharan Africa, (n = 45)
Latin America & Caribbean, (n = 29)
East Asia & Pacific, (n = 23)
North America, (n = 3)



### 3. Inscriptions

Moyenne : 2 533 657

Médiane : 405 404

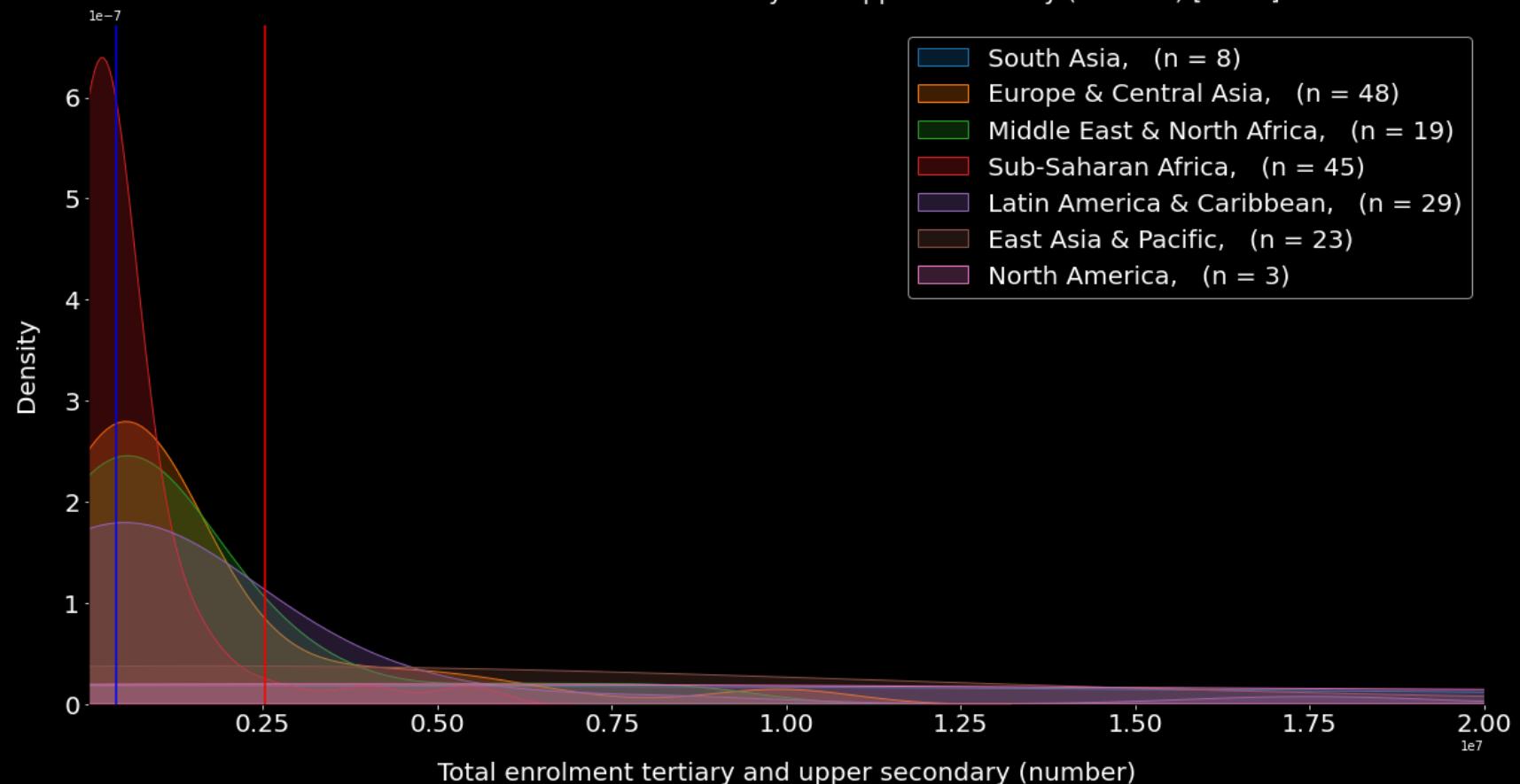
Ecart Type : 9 461 920

Asymétrie : 7,64

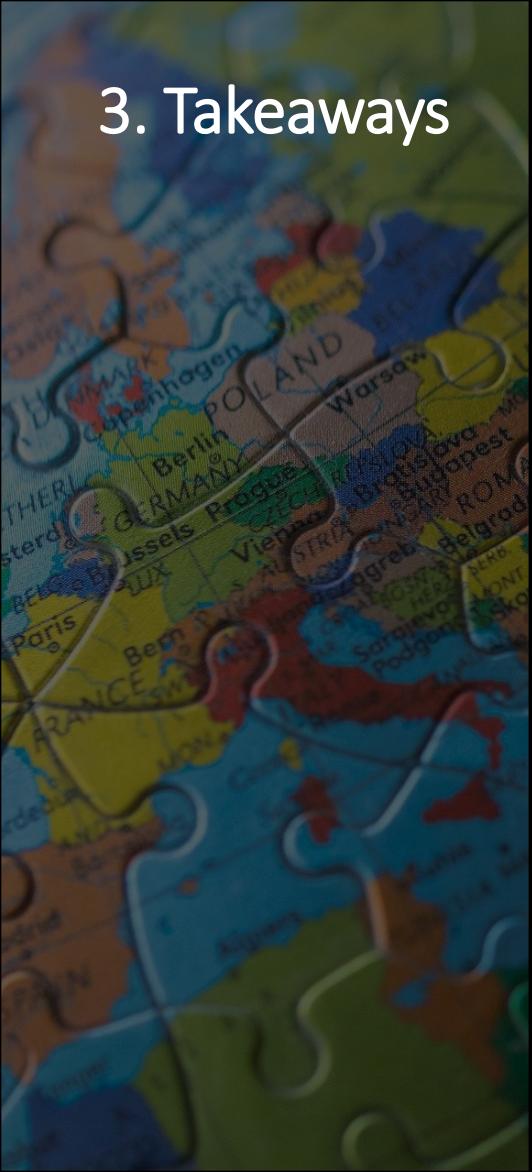
Inde Chine [85, 86] M

Distribution de Total enrolment tertiary and upper secondary (number) [zoom]

- South Asia, (n = 8)
- Europe & Central Asia, (n = 48)
- Middle East & North Africa, (n = 19)
- Sub-Saharan Africa, (n = 45)
- Latin America & Caribbean, (n = 29)
- East Asia & Pacific, (n = 23)
- North America, (n = 3)



### 3. Takeaways



**Outliers**

**Avant 3Q groupées, Après très dispersées**

**RNB & Internet ; Population & Inscriptions**

**Seuils**

## 4. Classements et projections

Massé Monétaire Inscriptions =  \* 

Inscrits

## 4. Classements et projections

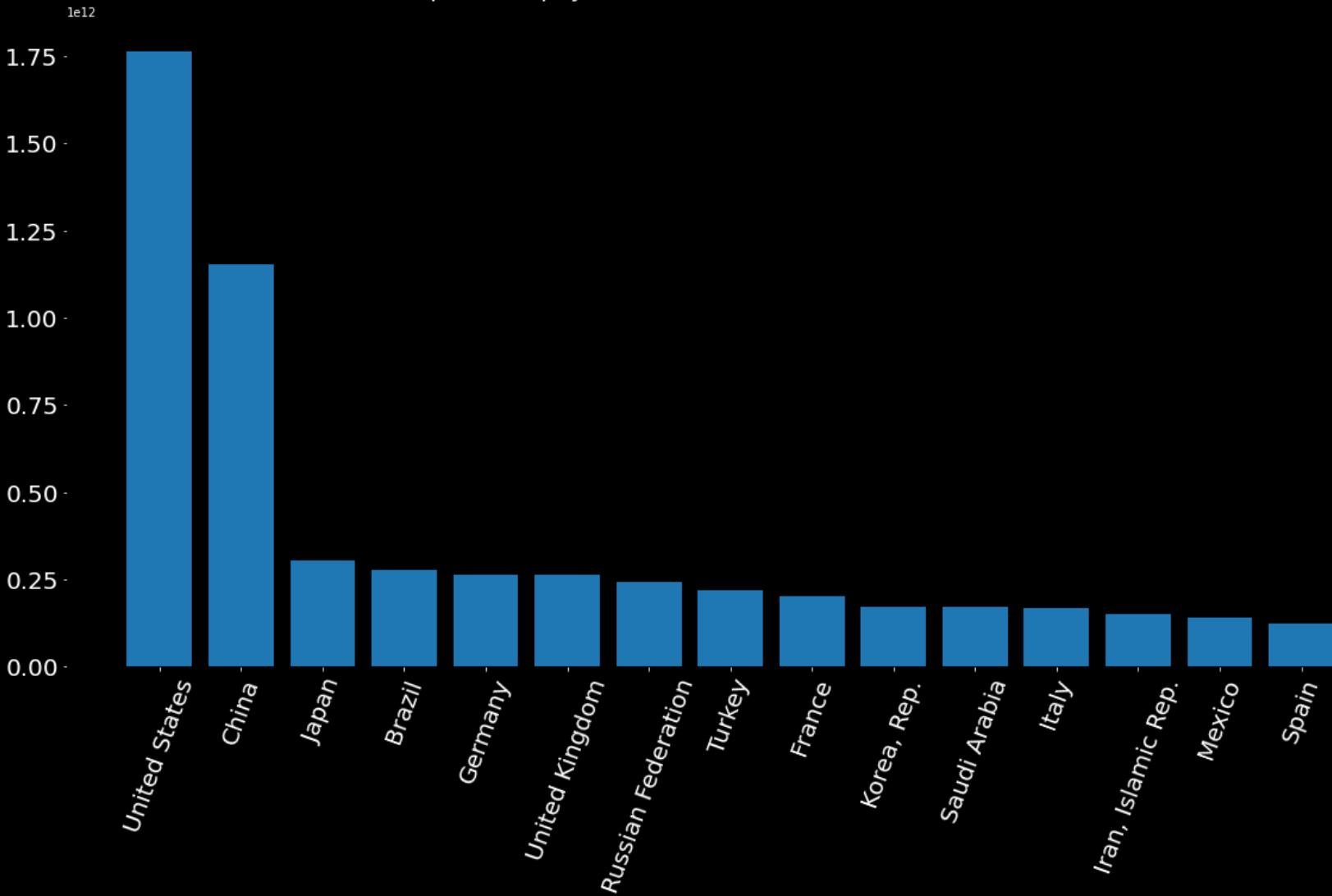
Massé Monétaire Marché =  
*(un an)*



## 4. MMI



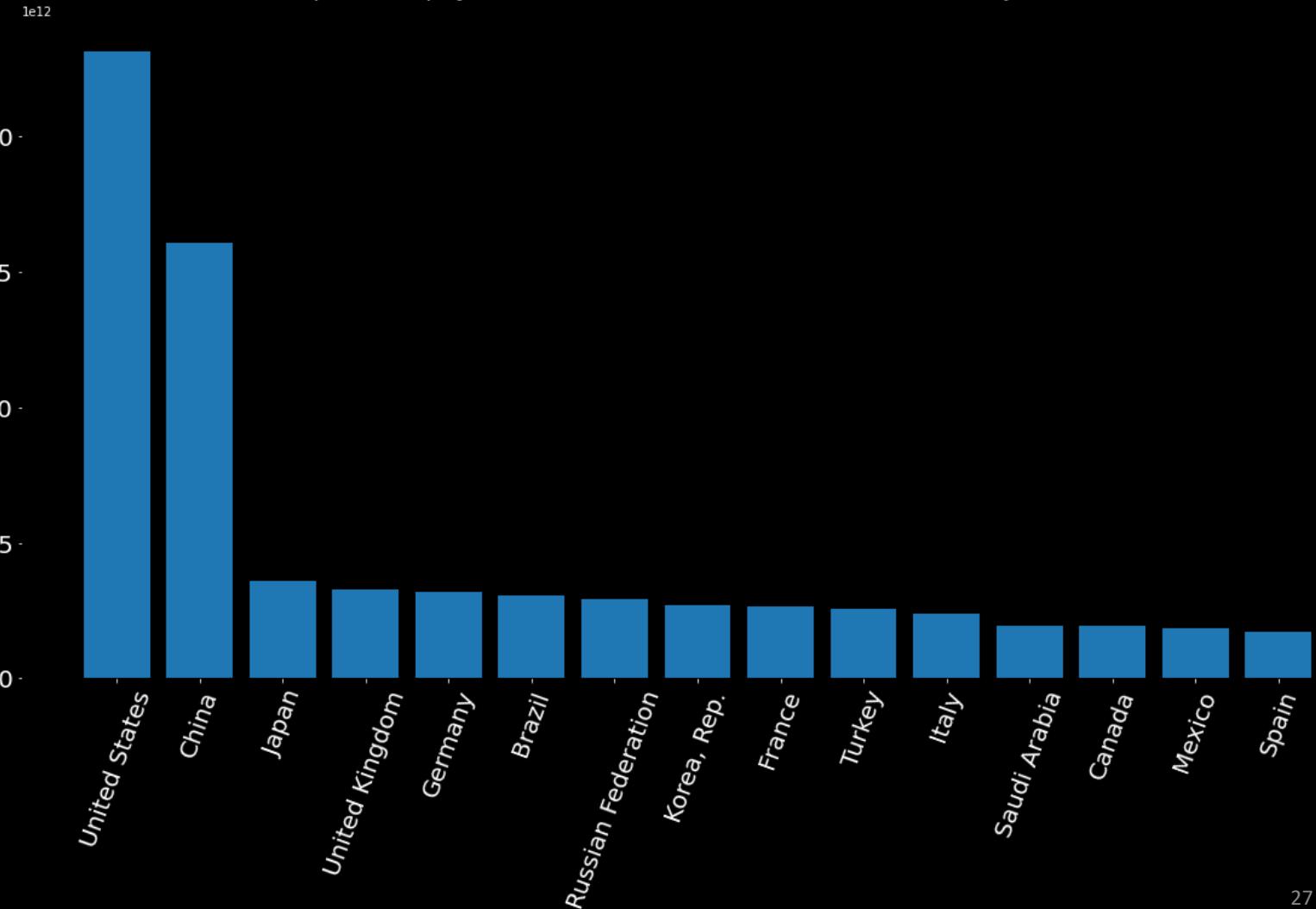
Top 15 des pays en fonction du calcul : Enrolment\*GNI



## 4. MMI



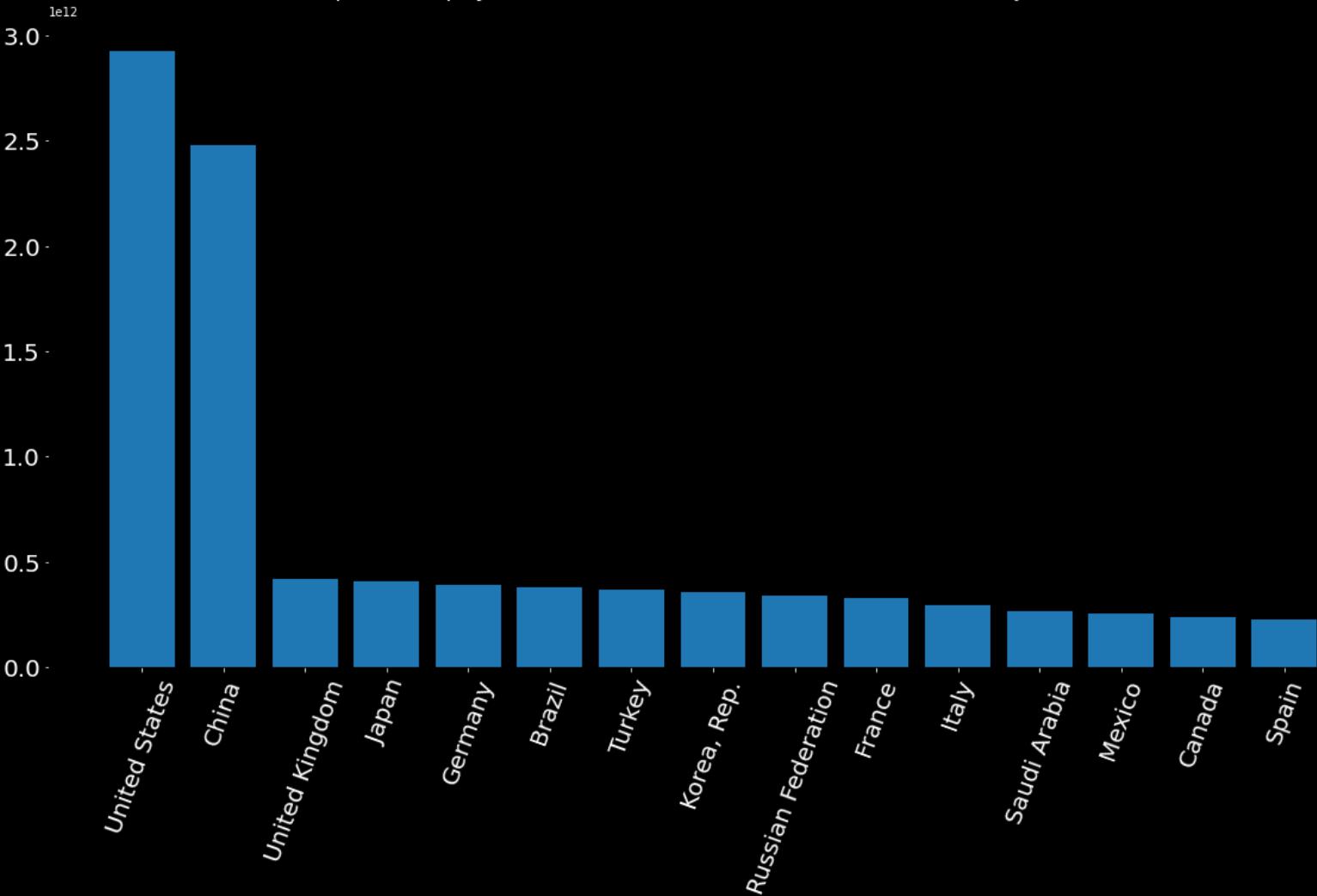
Top 15 des pays en fonction du calcul : Enrolment\*GNI (Projections)



## 4. MMI



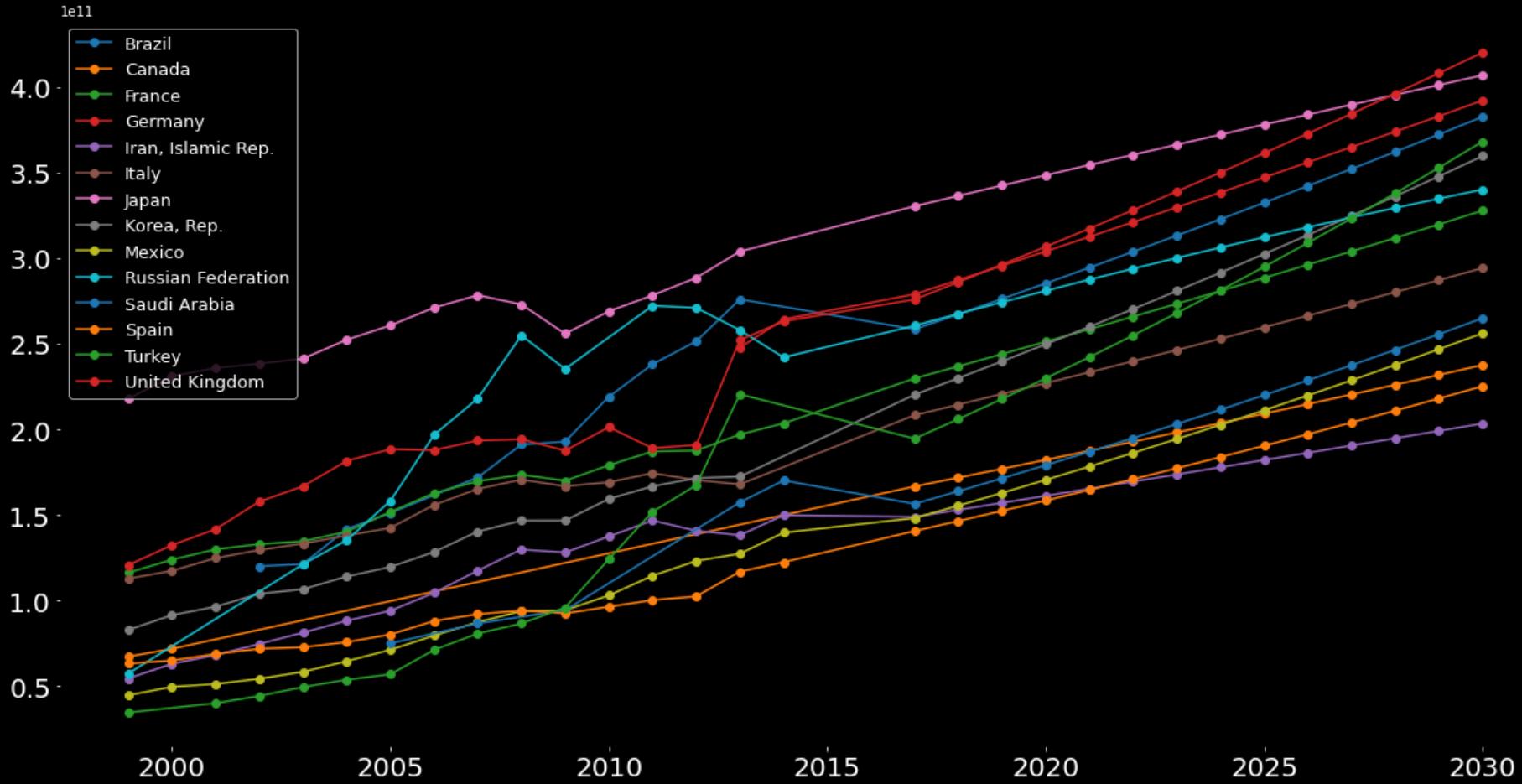
Top 15 des pays en fonction du calcul : Enrolment\*GNI (Projections)



## 4. MMI



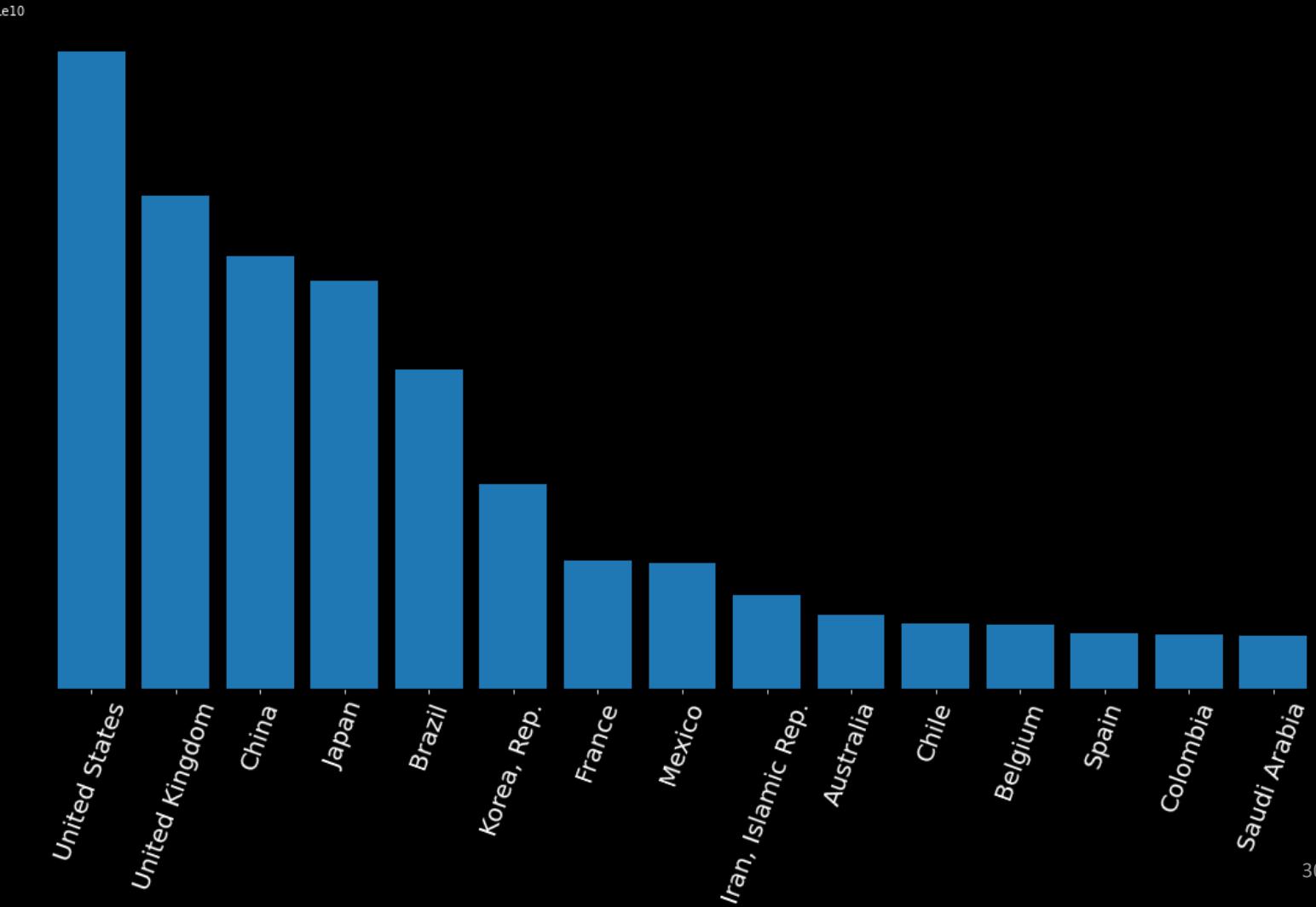
Tendance Top 16 (sans Chine et USA) Masse Monétaire Inscriptions



## 4. MMM



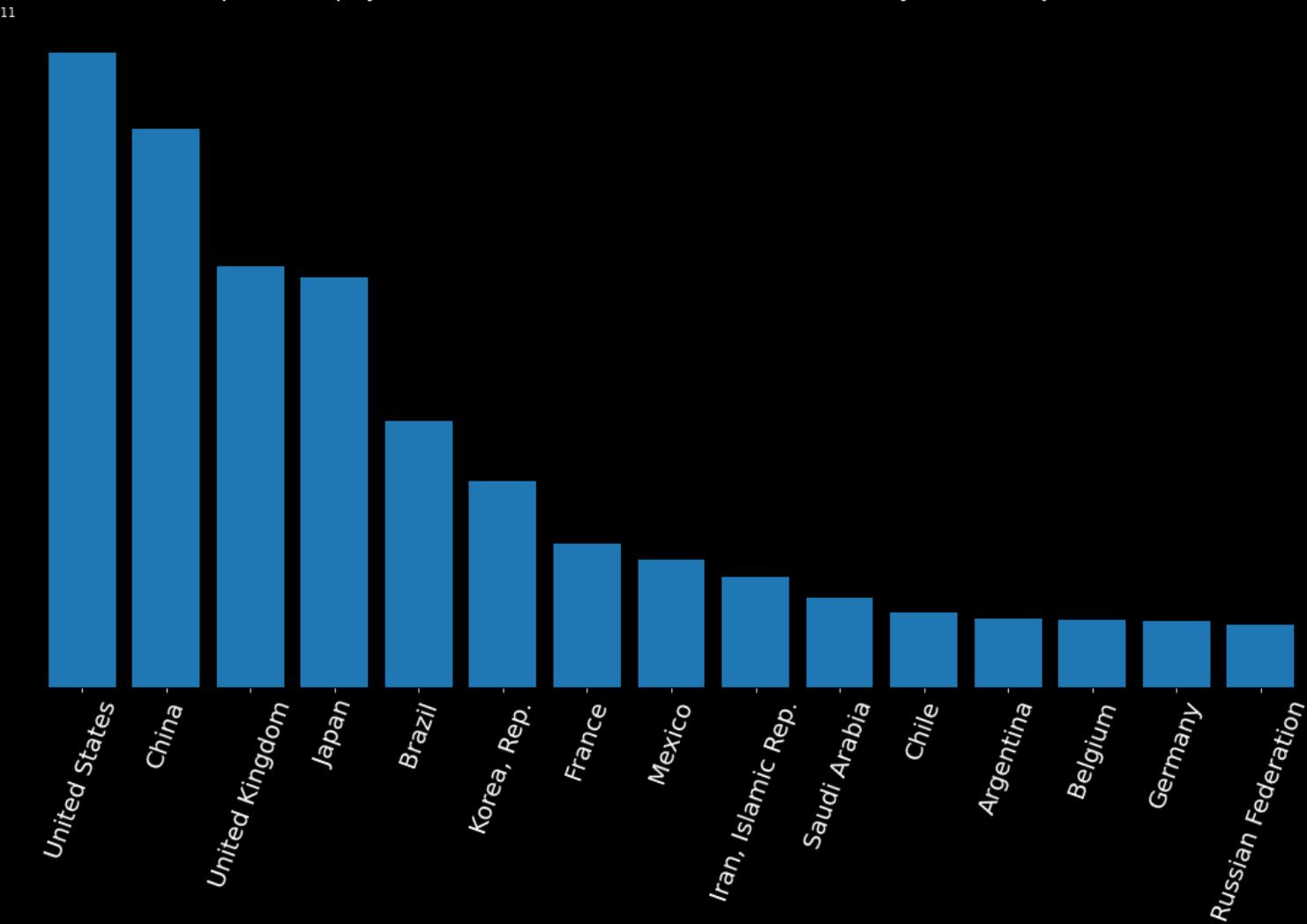
Top 15 des pays en fonction du calcul : Market's monetary mass



## 4. MMM



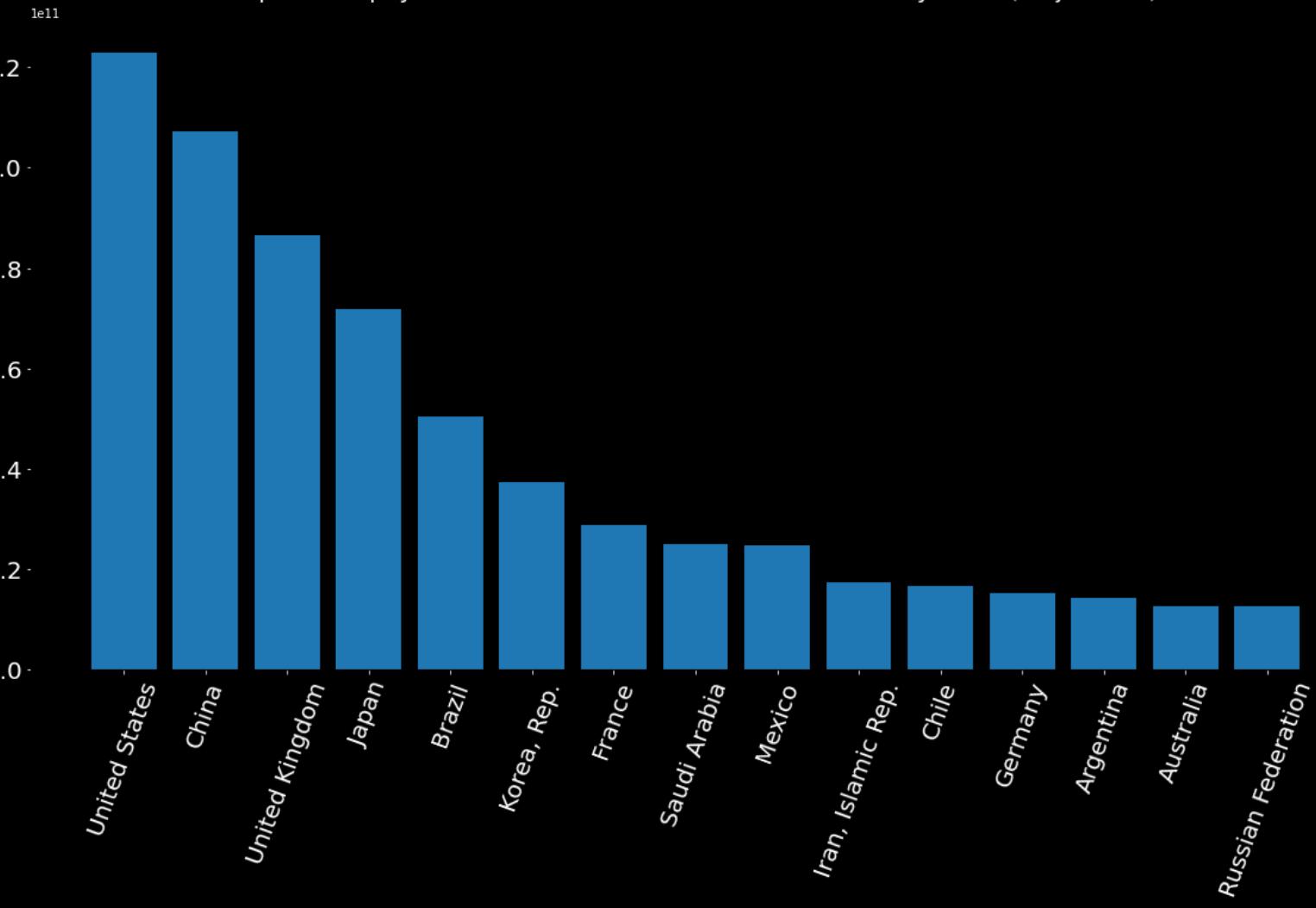
Top 15 des pays en fonction du calcul : Market's monetary mass (Projections)



## 4. MMM



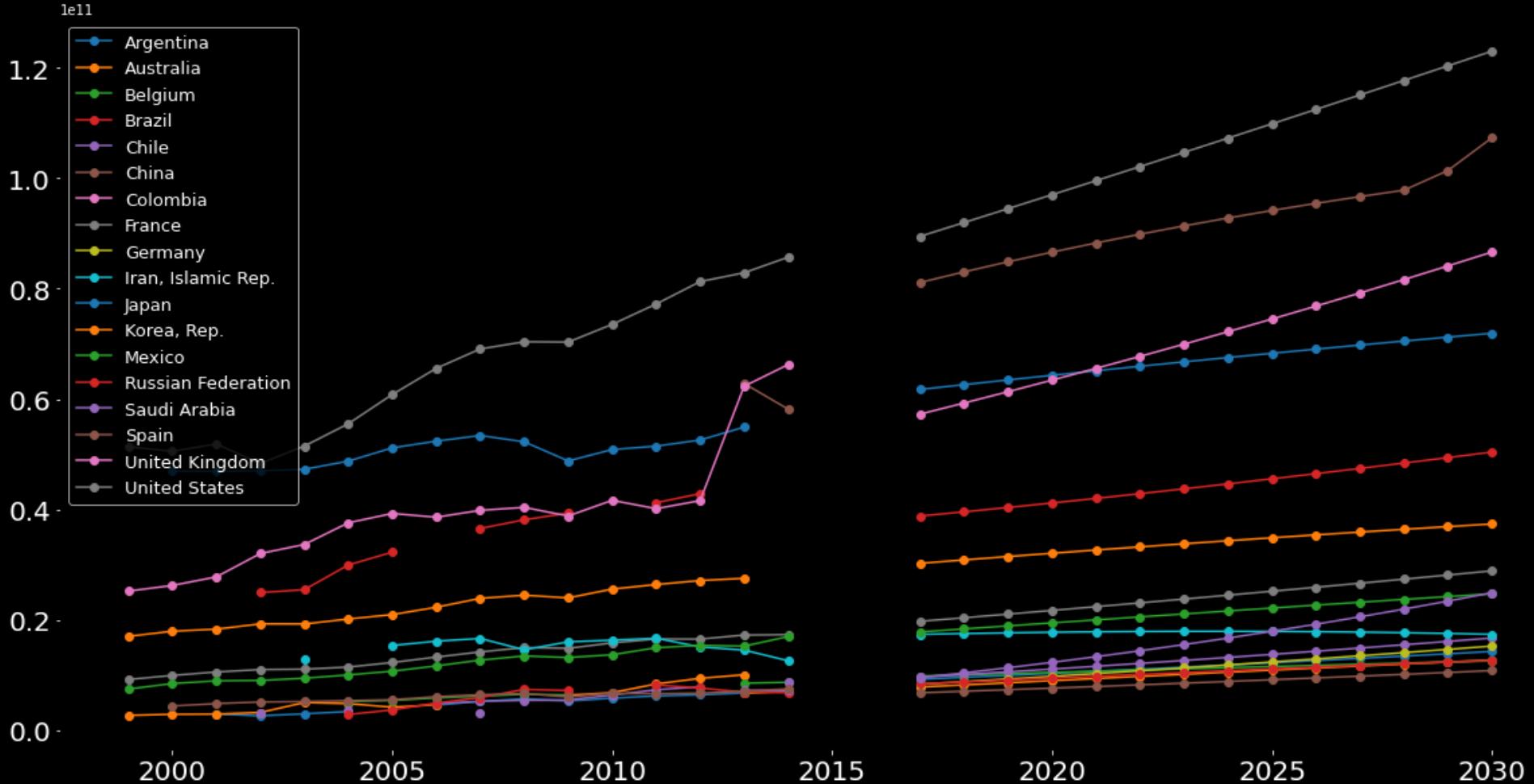
Top 15 des pays en fonction du calcul : Market's monetary mass (Projections)



## 4. MMM



Tendance Top 18 Masse Monétaire Marché



## 5. Limites

Scalabilité (Taux d'anglophonie, d'hispanophonie, etc.)

Vitesse Internet

Répartition des richesses

2015

Offre (substitut de formation ou complément ?)

Canada

Merci pour votre écoute !

