

# **Brazil and Argentina: analysis of indelicate indicators**

**Samuel Sanches**

# Dataset used

- World Development Indicators Dataset for Brazil and Argentina

Specifically the indicators:

- Death rate, crude (per 1,000 people)
- Hospital beds (per 1,000 people)
- Maternal mortality ratio (national estimate, per 100,000 live births)
- Government expenditure on education as % of GDP (%)
- Population, total

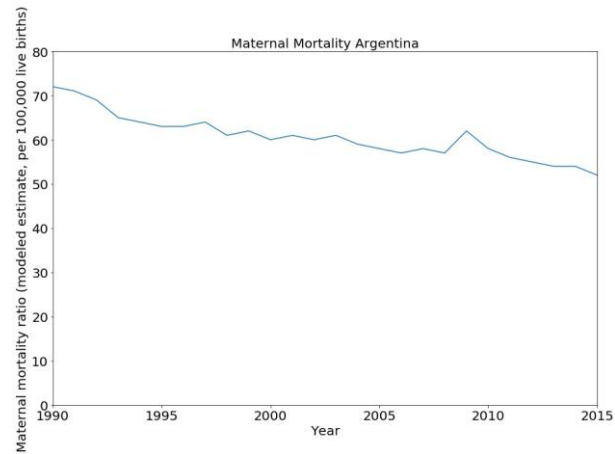
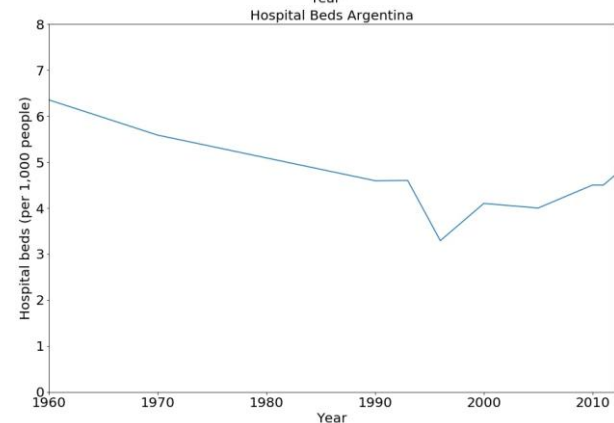
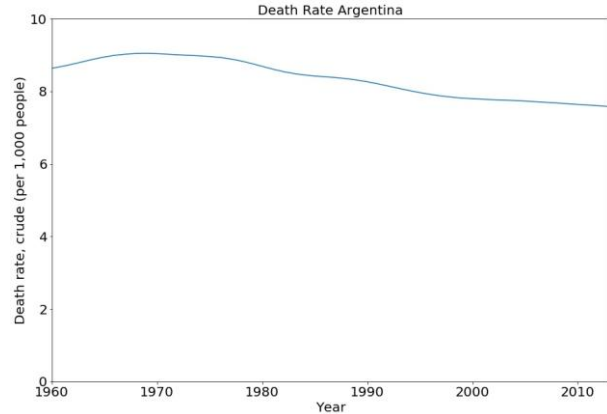
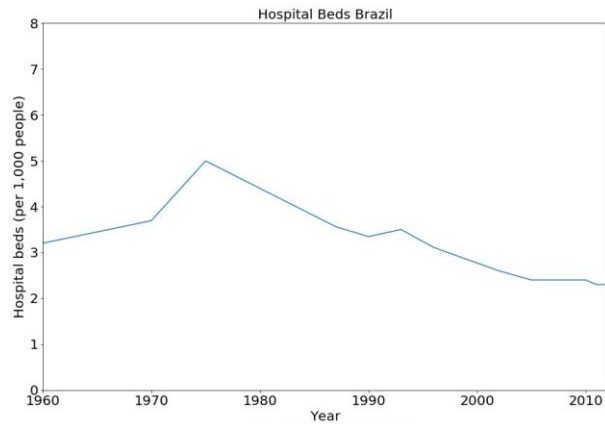
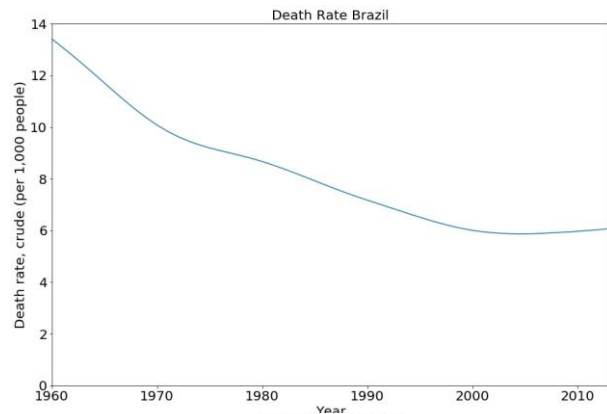
# Motivation

Using the “World Development Indicators” from Kaggle, explore some uncomfortable indicators for two emergent country, to visualize how better they are now, comparable with the whole world and search if these indicators have some correlation with the government expenditure on education and with the total population of the country.

# Research Questions

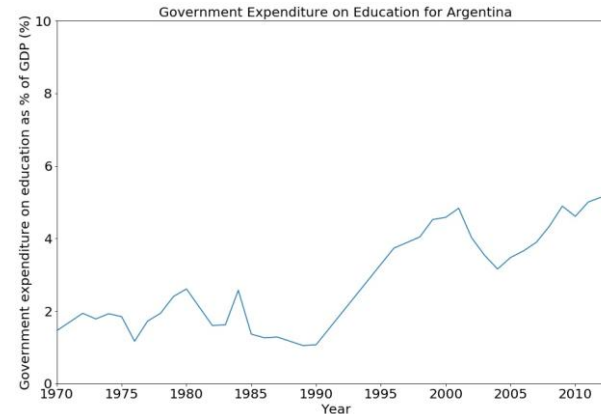
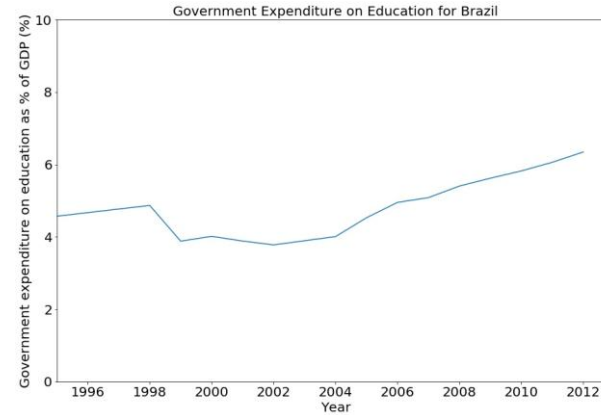
- How bad are these emergent countries?
- Is there any correlation between these indicators?
- Nowadays, they get better?
- Comparable with the whole world, where do they fit?

# Exploring the data

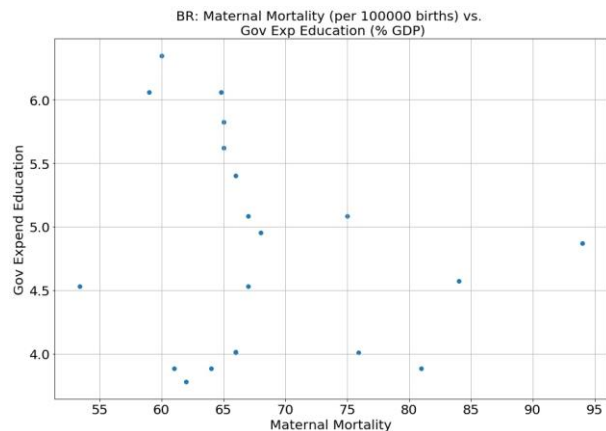
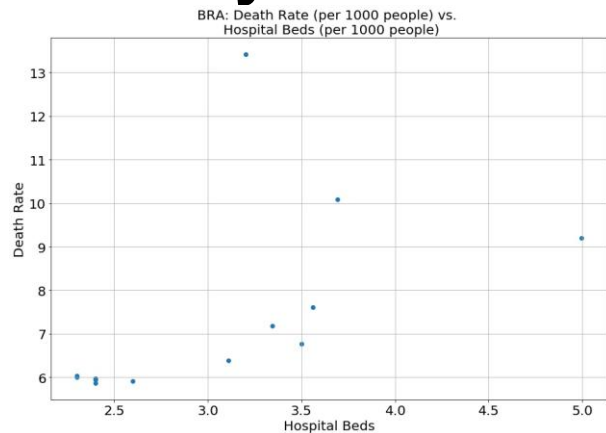


# How was the Government Expenditure on Education?

Looking back, apparently they became a little better in relation to these indicators, and the Government Expenditure on Education, had a small increase

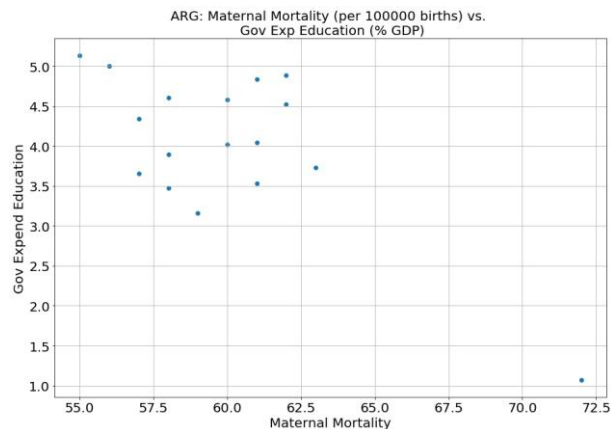
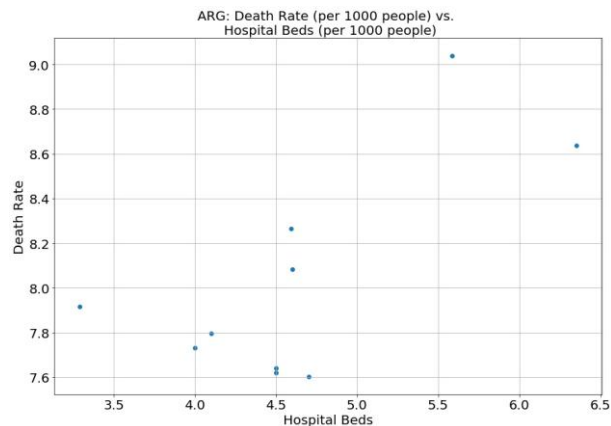


# Is there any correlation between these indicators?



	Death Rate	Hospital Beds	Maternal Mortality	Gov Expend Education
Hospital Beds	0.54	--	0.94	-0.89
Maternal Mortality	0.95	0.94	--	-0.19
Gov Expend Education	-0.02	-0.89	-0.19	--
Total Population	-0.96	-0.75	-0.86	0.75

# Is there any correlation between these indicators?



	Death Rate	Hospital Beds	Maternal Mortality	Gov Expend Education
Hospital Beds	0.69	--	-0.03	-0.38
Maternal Mortality	0.95	-0.03	--	-0.70
Gov Expend Education	-0.83	-0.38	-0.70	--
Total Population	-0.96	-0.73	-0.92	0.84

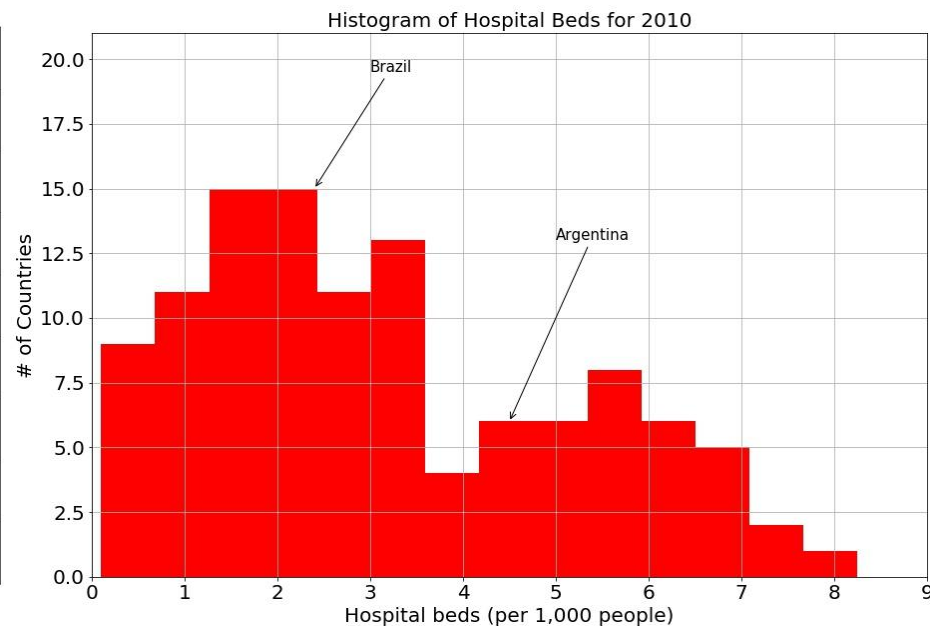
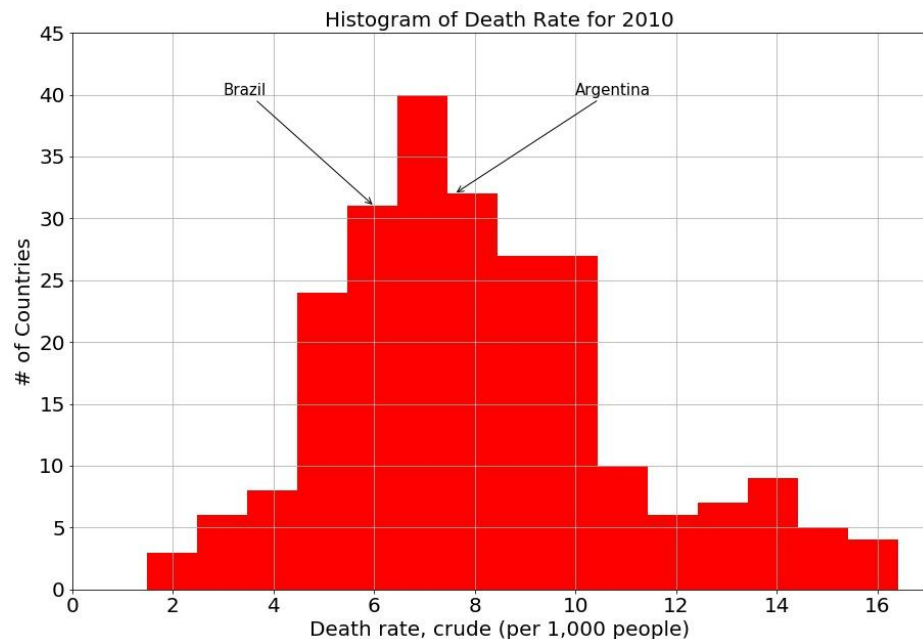


# A little about correlations

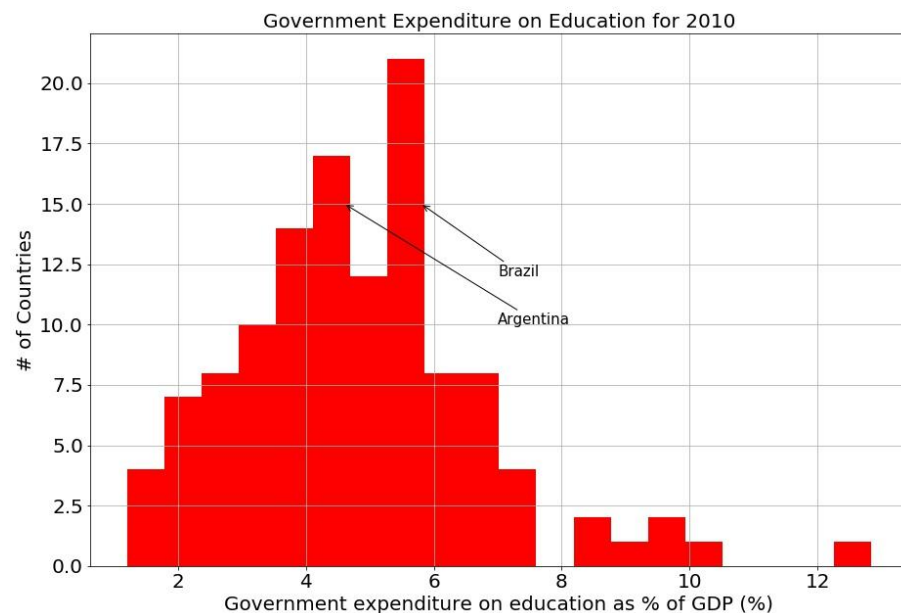
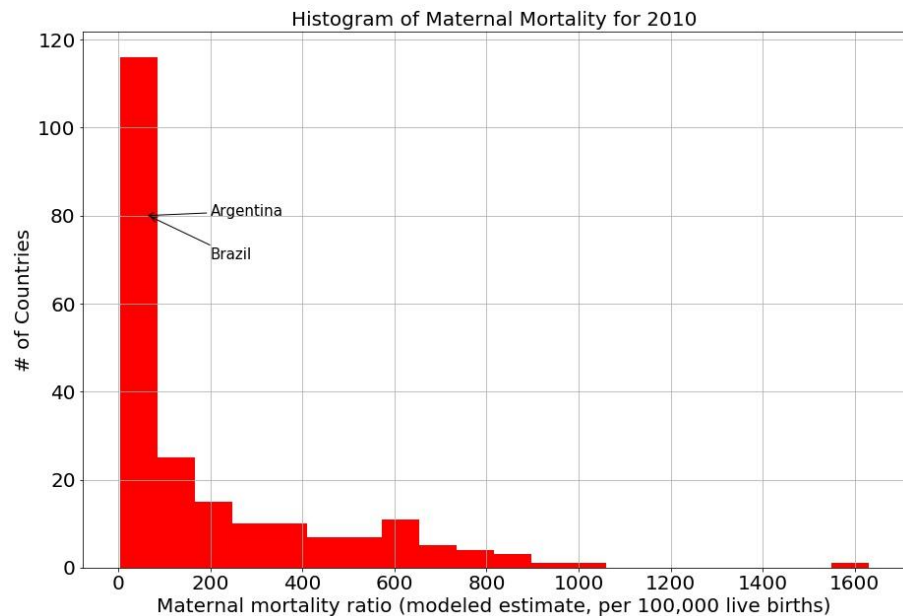
In the analysis, we see that the correlations are against the normal intuition.  
Maybe the choose of the indicators was not good.

We can conclude that, over the years these two countries have improved overall.  
Against a despicable increase on education expenditure.

# Let's see where these two countries are comparable with the whole world for the year 2010



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Although in some Argentina is better and in others the Brazil is better, we can conclude that both are equivalent in these indicators and that they fit approximately in the world average.