

Data Description

I chose representative types of annual data covering the period 1975 to 2014 (1200 in total) to explore the relationship between life expectancy and demographic structure, economic development, medical treatment level, climate and health conditions in 30 countries around the world. The final 6 regressors are presented below.

Infant mortality rate (IMR) (‰): A measure of a nation's medical level and health condition. Bhatt and Beck (2018) has proved that a significant decrease in IMR could be resulted from Medicaid expansion.

Population ages 65 and above (%): A measure of a nations' aging population. The larger aging population comes with a more unbalanced demographic structure. If the aging population is large, the whole country's life expectancy will be large but their economy would grow extremely slow. Government needs to make a tradeoff between them.

Female in percentage of total population (%): A measure used to reflect whether gender is balanced in the population. A larger female population comes with a more unbalanced gender structure. We suspected that larger female population will increase the country's life expectancy.

GDP per capita (constant 2010 US\$): GDP per capita is GDP divided by midyear population (adjusted for inflation). It is an economic indicator usually used to compare the living standard between countries over time. Higher GDP per capita indicates a higher living standard, which will generally lead to longer life expectancy.

Carbon dioxide (CO₂) emissions (kt): Data used to measure climate situation. If CO₂ emissions are high, it may affect the stability of climate and might resulted in the happening of extreme weather, which would have bad effects on the living environment of citizens.

Prevalence of underweight among adults, BMI<18 (crude estimate) (%): A rate which is a measure of health condition. If the rate is high, citizens are more likely to suffer from starving and their quality of standard of living is low, which may resulted in a shorter life expectancy.

Besides the data of prevalence of underweight among adults, which are collected from WHO (<https://www.who.int/en/>), others are all collected from World Bank (<https://data.worldbank.org/>).

List of all variables and data sources are presented below.

Variable	Definition	Source
<i>mr rate</i>	<i>Infant Mortality Rate (per 1,000 live births)</i>	World Development Indicators Database, World Bank

		https://databank.worldbank.org/reports.aspx?source=2&series=SP.DYN.IMRT.IN&country=
<i>aging</i>	Population ages 65 and above (% of total population)	World Development Indicators Database, World Bank https://databank.worldbank.org/reports.aspx?source=2&series=SP.POP.65UP.TO&country=
<i>frate</i>	Population, female (% of total population)	World Development Indicators Database, World Bank https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS
<i>gdp</i>	GDP per capita (2010 constant US\$)	World Development Indicators Database, World Bank https://data.worldbank.org/indicator/NY.GDP.PCAP.KD%C2%A0
<i>carb</i>	CO2 emissions (kiloton)	World Development Indicators Database, World Bank https://databank.worldbank.org/reports.aspx?source=2&series=EN.ATM.CO2E.KT&country=
<i>bmi</i>	Prevalence of underweight among adults, BMI<18 (crude estimate) (%)	World Health Organization http://apps.who.int/gho/data/view.main.NCDBMILT18Cv?lang=enation
<i>life</i>	Life Expectancy at Birth, Total (years)	World Development Indicators Database, World Bank https://databank.worldbank.org/reports.aspx?source=2&series=SP.DYN.LE00.IN&country=

References

Data.worldbank.org. (2019). High income | Data. [online] Available at: <https://data.worldbank.org/income-level/high-income?view=chart> [Accessed 3 Oct. 2020].

Data.worldbank.org. (2019). Middle income | Data. [online] Available at: <https://data.worldbank.org/income-level/middle-income?view=chart> [Accessed 3 Oct. 2020].

Data.worldbank.org. (2019). Mortality rate, neonatal (per 1,000 live births) | Data. [online] Available at: <https://data.worldbank.org/indicator/SH.DYN.NMRT?view=chart> [Accessed 3 Oct. 2020].

Data.worldbank.org (2019). GDP per capita (constant 2010 US\$)| Data. [online]

Available at: <https://data.worldbank.org/indicator/NY.GDP.PCAP.KD> [Accessed 3 Oct. 2020].

Data.worldbank.org. (2019). Life expectancy at birth, total (years) | Data. [online] Available at: <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?view=chart> [Accessed 3 Oct. 2020].