

Gapminder Exploration

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1. Overview

- ▶ The gapminder dataset contains life expectancy, population, and GDP per capita data for 142 countries
- ▶ Data was collected every 5 years from 1952 to 2007
- ▶ The complete gapminder data set has 1704 observations.

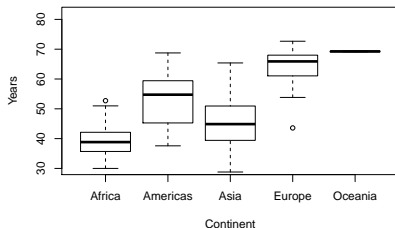
2. Analysis

- ▶ Africa has 624 observations, 276 more than the next continent, Asia
- ▶ Across all countries, GDP per capita ranges from 24 USD to 624 USD
- ▶ The mean (7215.3270812) is twice as large as the median (3531.8469885)
- ▶ GDP per capita data has a large positive skew.

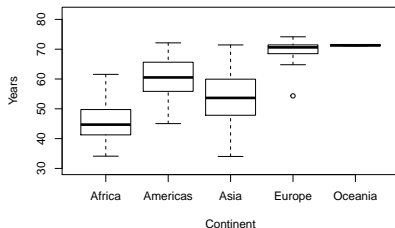
3 Life Expectancy by Continent

Life expectancies of Asian countries have steadily increased

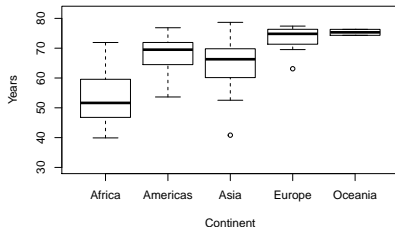
Life Expectancies in 1952



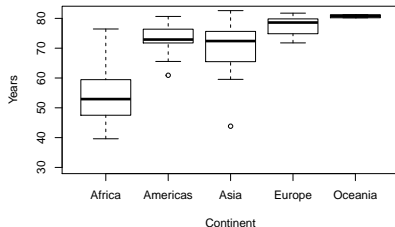
Life Expectancies in 1967



Life Expectancies in 1987



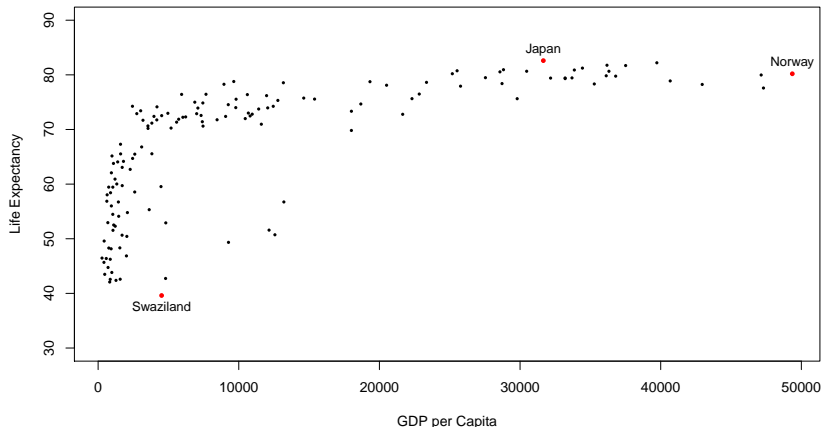
Life Expectancies in 2007



4 Life Expectancy and GDP per Capita in 2007

- ▶ Longest life expectancy: Japan (82.6 years)
- ▶ Highest GDP per capita: Norway (US\$49357.19)
- ▶ Shortest life expectancy: Swaziland (39.6 years)

Plot of 2007 Life Expectancy against 2007 GDP per Capita



5 Life Expectancy and GDP per Capita for Canada

- ▶ Life expectancy and GDP per capita for Canada have both increased over time
- ▶ The relationship has been approximately linear

Data for Canada from 1952 thru 2007

