

# Determinants of HIV

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# Outline

- Motivation
- Research Question
- Methodology
- Literature Review
- Descriptive Statistics
- Findings
- Conclusion and Limitations

# Motivation and Research Question

- 1 Understand why some countries failed to achieve MDG 6A
  - *MDG 6: Combat HIV/AIDS, malaria and other diseases*
  - *Target 6A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS*

Source: <http://www.mdgmonitor.org/goal6.cfm>

- 2 Explore disease-specific determinants of health

**Research Question: Are community level factors significant determinants of HIV/AIDS incidence rates?**

# Methodology and Dataset

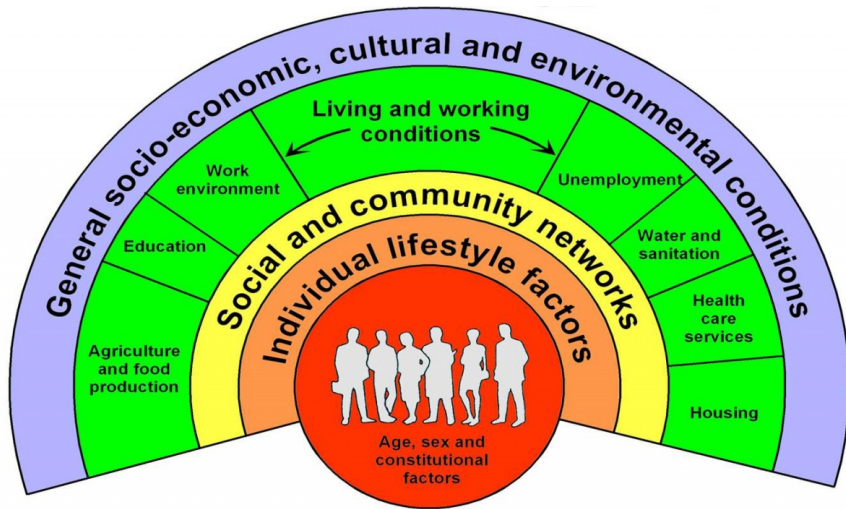
## Methodology

- We will. . .

## Datasets

- We will use the World Development Indicators (WDI) for the independent variables and a dataset from UNAIDS for the HIV/AIDS prevalence rate.

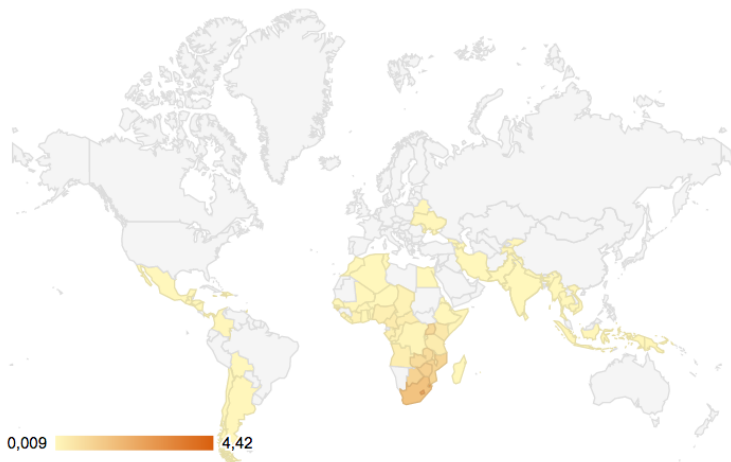
# Literature Review



Source: Dahlgren and Whitehead, 1991

# Descriptive Statistics

# Incidence



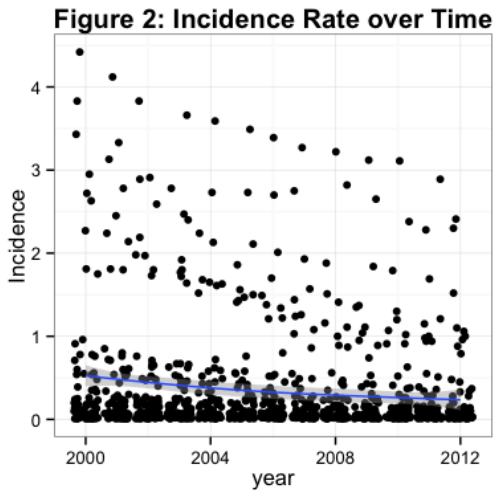
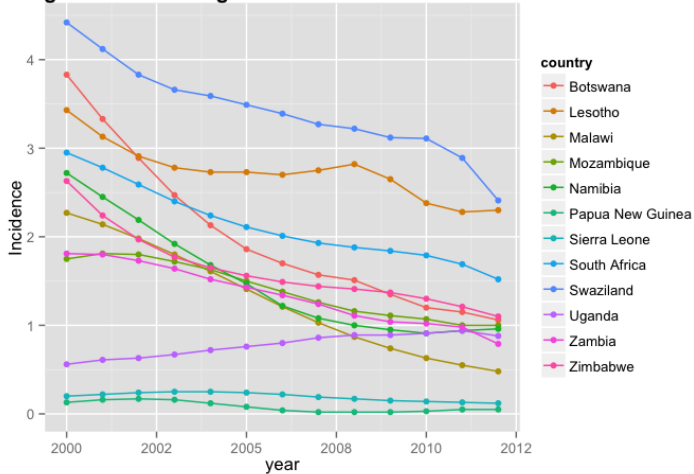
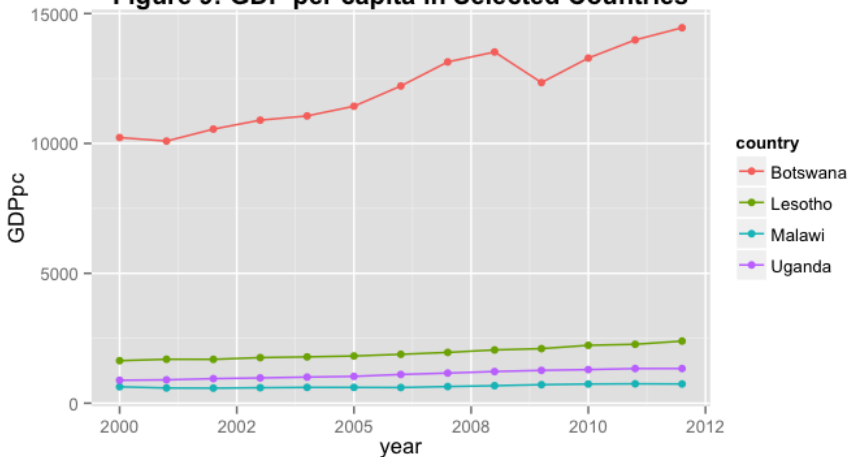




Figure 6: Interesting Cases for HIV Incidence Rates



**Figure 9: GDP per capita in Selected Countries**



**Figure 7: Access to Water in Selected Countries**

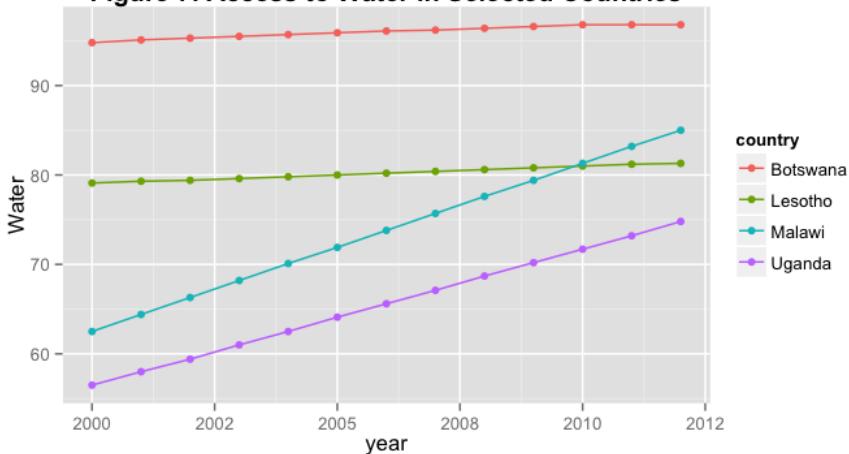
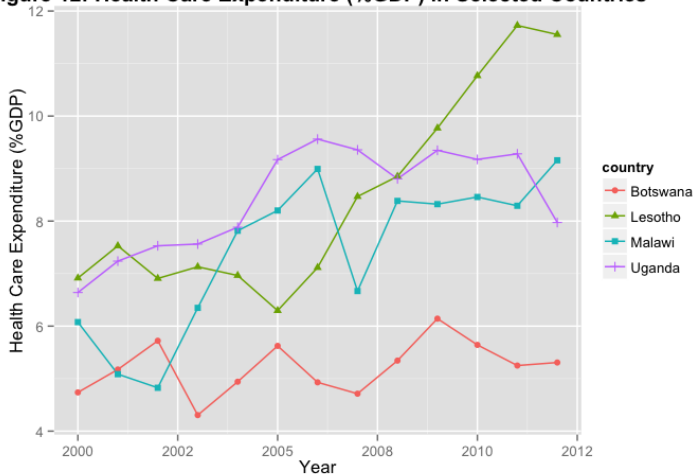


Figure 12: Health Care Expenditure (%GDP) in Selected Countries



**Figure 10: Level of Female Schooling in Selected Countries**

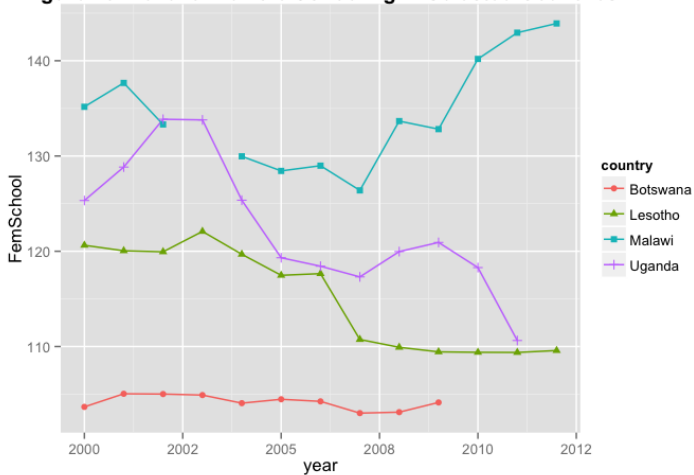
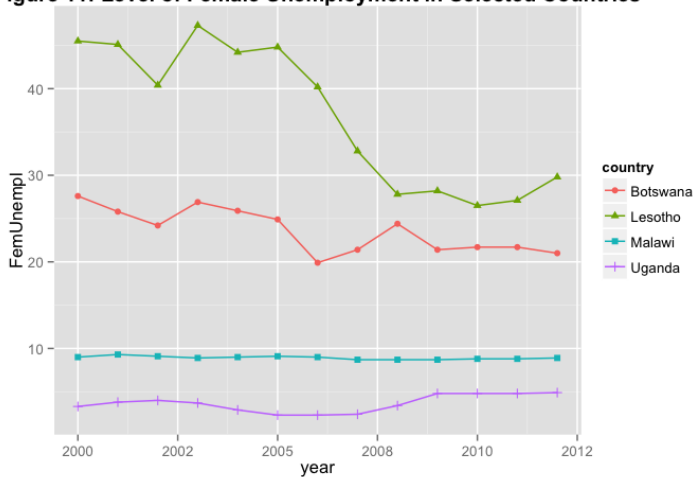


Figure 11: Level of Female Unemployment in Selected Countries



# The Model

To answer our research question we will estimate the following equation:

$$I_{it} = \beta_0 + \beta_1 SE_{it} + \beta_2 WLC_{it} + \beta_3 SCN_{it} + \beta_4 ILF_{it} + \epsilon_{it}$$

Where I stands for HIV/AIDS incidence, SE stands for socioeconomic factors, WLC stands for working and living conditions, SCN stands for social and community networks and ILF stands for individual lifestyle factors.

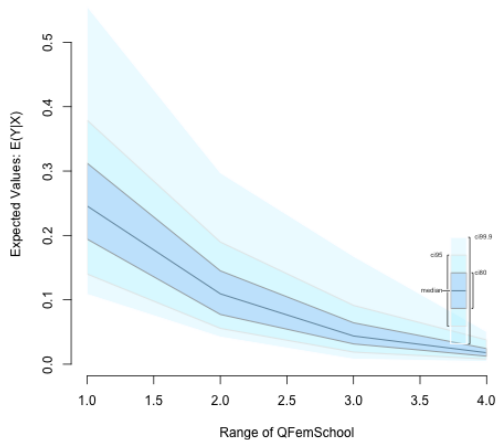
# Findings



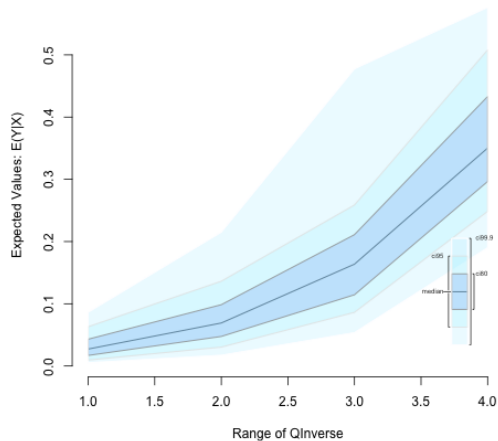
# Imputed missing values

# Predicted Probabilities

# Malawi



# Malawi 2



# Conclusions and Limitation