# Analysis of life expectancy in various countries

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### Dataset

- World Development Indicators Dataset
  - Indicators used:
    - Life expectancy at birth, total
    - Physicians (per 1,000 people)
    - Hospital beds (per 1,000 people)
    - Inflation, GDP deflator (annual %)
    - Food production index (2004-2006 = 100)

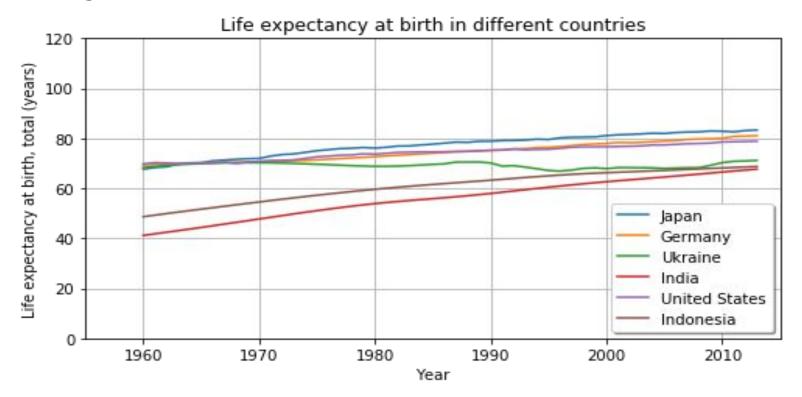
## Motivation

Life expectancy is a statistical measure of the average time an organism is expected to live. Through this analysis, I am trying to explore how it varies across different developing and developed countries. Had the countries made improvement in the field. In the next part, I am trying to understand if any country showed an anomaly, if so what could be the probable cause.

## **Research Questions**

- 1) How life expectancy varies in developing and developed countries?
- Is there any noticeable trend? If so what could be the possible factors causing the trend.

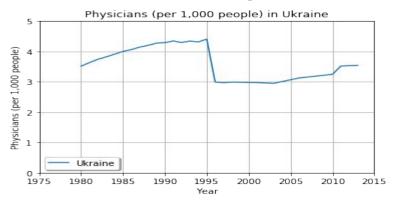
# Findings

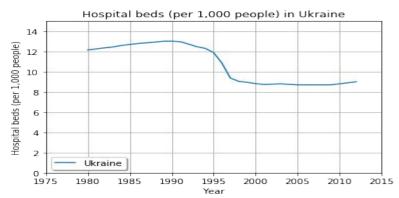


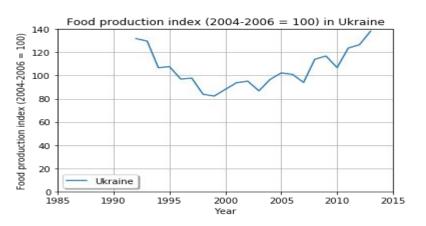
For this analysis, I have taken 3 developing and 3 developed countries.

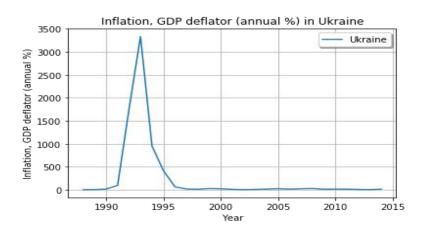
- 1. From the previous graph, all developed countries (USA, Japan, Germany) had an increase in life expectancy by an average of 12 and was able to achieve life expectancy in the range of 75-85 by 2013 whereas in developing countries expect Ukraine, has showed an increase by 20(Indonesia) and 26(India) years and achieved life expectancy in the range of 65-75 by 2013.
- 2. All countries expect Ukraine has showed a steady increase in life expectancy.
- 3. Ukraine showed a different picture, it showed a decline in life expectancy especially in the 1990s and it could only raise the life expectancy by 2 years in 53 year period considered for this analysis.

#### Exploring the reasons for the unexpected trend in Ukraine









Note: some of the features have data values only from 1990 s

# Findings

- Indicators analysed are hospital beds(per 1000 people),
  Physicians(per 1000 people), Food production index and Inflation,
  GDP deflator (annual %).
- From exploring the health care resources, it is clear that there has been a decline in hospital beds and physicians in the 1990s which could have acted as a potential cause in the decline in life expectancy.
- Food production index also showed a decline in the 1990s.
- From the bottom right graph, it is clear that Ukraine faced an extreme inflation in the 1990s.

## Conclusion

All the countries except Ukraine showed an increase in life expectancy throughout the period without much deviations. India showed a tremendous increase of 26 years in the 53 year period that was taken in consideration for this analysis. In exploring the probable causes for the indifferent result in Ukraine's life expectancy, I was able to understand that decline in health care services and changes in economic conditions in the 1990s could have potentially effected the life expectancy in Ukraine.

# Acknowledgements

No feedback.

## References

No references.