

University College Cork



CS3205 Lab Report 1

HDI Trends and Multidimensional Projections

Jack O'Connor

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# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	The Problem . . . . .	1
1.2	The Datasets . . . . .	1
1.3	The Role of Visualisations . . . . .	1
<b>2</b>	<b>Data Description</b>	<b>1</b>
2.1	hdr.xlsx . . . . .	1
2.2	hdi.csv . . . . .	1
<b>3</b>	<b>Task 1</b>	<b>1</b>
3.1	Free Exploration . . . . .	1
3.1.1	HDI Histogram . . . . .	1
3.1.2	Global Average HDI . . . . .	1
3.1.3	Min/Max HDI Radial Plot . . . . .	2
3.1.4	Expected Population Growth . . . . .	2
3.1.5	Male/Female Average Years Education . . . . .	2
3.2	Specific Observations . . . . .	2
3.2.1	Spurious Values . . . . .	2
3.2.2	HDI Global Heatmap . . . . .	2
3.2.3	Correlated/Uncorrelated Attributes . . . . .	2
3.2.4	Hypotheses for Previous Patterns . . . . .	3
3.2.5	Usefulness of All Visualisations . . . . .	3
3.2.6	Alternative Visualisations . . . . .	3
<b>4</b>	<b>Task 2</b>	<b>3</b>
4.1	Corel Projections Comparison . . . . .	3
4.2	CBR Projections Comparison . . . . .	3
4.3	Dataset 1 Projections Comparison . . . . .	3
4.4	Dataset 2 Projections Comparison . . . . .	3
4.5	Projections of HDR . . . . .	3
<b>5</b>	<b>Conclusions</b>	<b>3</b>
<b>6</b>	<b>References</b>	<b>3</b>

# 1 Introduction

## 1.1 The Problem

the problem

## 1.2 The Datasets

the datasets

## 1.3 The Role of Visualisations

the role of visualisations

# 2 Data Description

## 2.1 hdr.xlsx

Description of data.

## 2.2 hdi.csv

Description of data.

# 3 Task 1

## 3.1 Free Exploration

In the free exploration section of the assignment I have created visualisations which give a broad overview of the general distribution of HDI across countries when looking at specific attributes of those countries.

Each of the following visualisations will include:

- A graphic
- A description of a pattern (or lack of)
- A hypothesis as to the cause of this pattern
- The dataset from which the data came

### 3.1.1 HDI Histogram

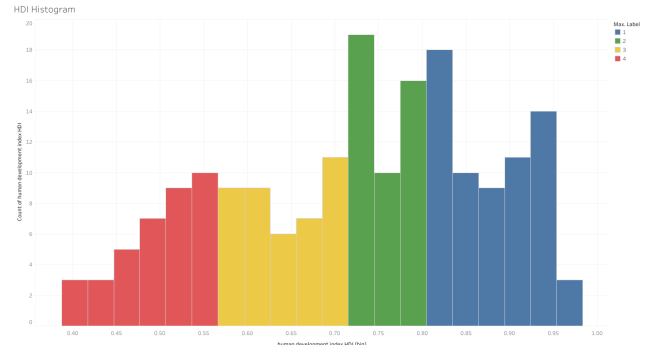


Figure 1: my hdi caption

a

### 3.1.2 Global Average HDI

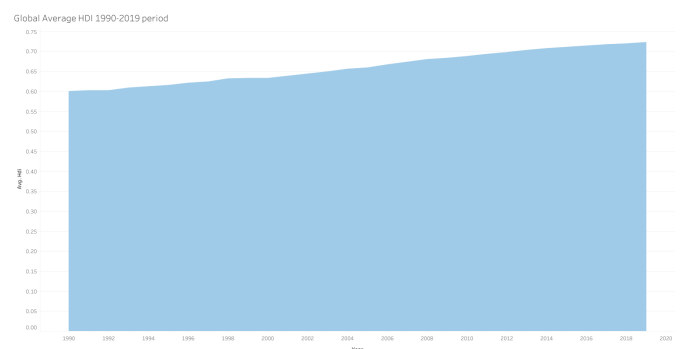


Figure 2: no dips

a

3.1.3 Min/Max HDI Radial Plot

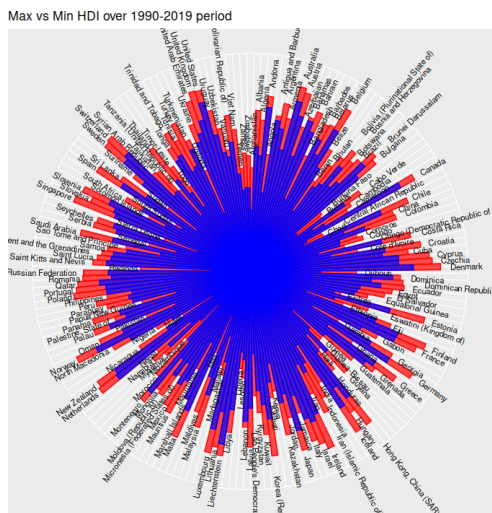


Figure 3: going in circles

a

3.1.4 Expected Population Growth



Figure 4: sexy visual

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3.1.5 Male/Female Average Years Education



Figure 5: girl power

a

3.2 Specific Observations

In the specific observations section of the assignment I have created visualisaions in line with the task list specifications.

3.2.1 Spurious Values

3.2.2 HDI Global Heatmap

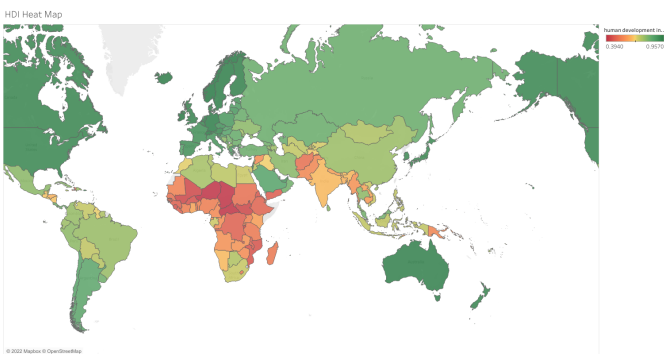


Figure 6: what a pretty map

a

3.2.3 Correlated/Uncorrelated Attributes

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### **3.2.4 Hypotheses for Previous Patterns**

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### **3.2.5 Usefulness of All Visualisations**

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### **3.2.6 Alternative Visualisations**

a

## **4 Task 2**

Results for task 2.

### **4.1 Corel Projections Comparison**

a

### **4.2 CBR Projections Comparison**

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### **4.3 Dataset 1 Projections Comparison**

a

### **4.4 Dataset 2 Projections Comparison**

a

### **4.5 Projections of HDR**

a

## **5 Conclusions**

Conclusions from overall assignment, emphasis on data sets, exercises and using visualisations.

## **6 References**

References?