## **Comparative Study of Countries.**

Course-end Project 1

### Description

You are a data analyst working for an insurance company. The company is expanding and wants to open new branches in various parts of the world. Your task is to compare various parameters such as income, life insurance share, market share, penetration, ratio of reinsurance accepted, and retention ratio of different countries using the sample insurance dataset and world development indicators dataset.

#### **Objective:**

Create a dashboard to compare all the parameters mentioned above for different countries, to strategize market penetration and to target new customers.

#### Datasets:

Primary Dataset – Insurance Sample Dataset

Secondary Dataset – Global Financial Development Database

Note: Use Data Blending with Relationships between Country Code, Country, and Year

Steps to follow:

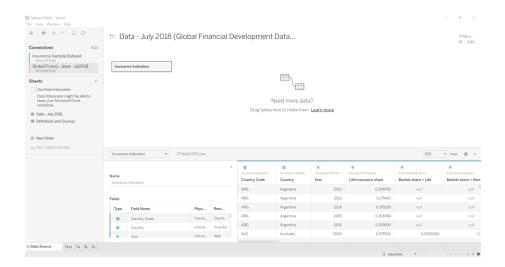
Step 1: Open Tableau 10.x

**Step 2:** On the home page, under **Connect**, under **to a file**, click **Excel**.

**Step 3:** Browse and connect to the **Global Financial Development Database - Jul2018** Excel file.

**Step 4:** Drag and drop **Data July 2018** tables to the canvas area.

Step 5: Click on Add button to connect Insurance Sample Dataset Excel file.

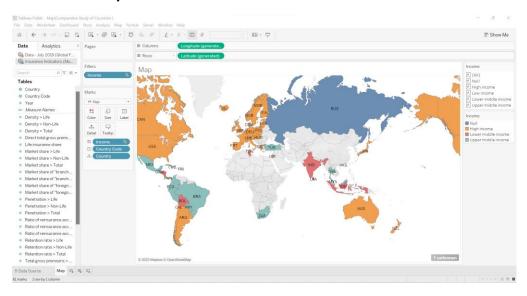


Task 1. Create a geographic map showing the countries' fields. Color the map based on the income column from the secondary dataset.

• Include income group filter in the dashboard.

**Step 6:** Go to Sheet one and rename it as MAP.

**STEP 7:** To Create a **MAP**, drag **Country** from **Insurance Sample Dataset** and put on Detail Mark card and then go to automatic and click map. Then drag Income from **Global Financial Development Database** to filter and select all and click on show filter. Drag **Income** to Color Mark Card and **Country Code** to text Mark card.



Task:2. Include a webpage to show data from the world bank webpage driven by an URL action from a geography graph

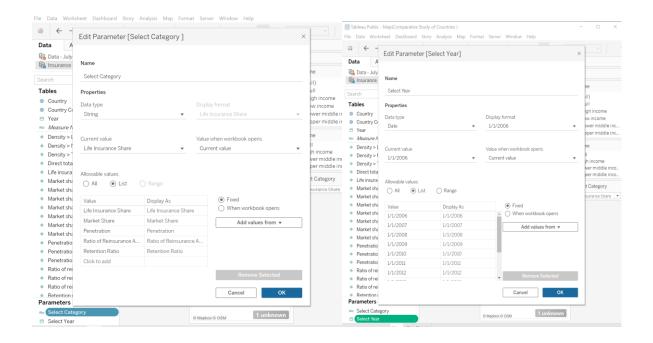
 The country names in the map will act as the triggerhttps://en.wikipedia.org/wiki/Country

Step8:

- 3. Create a KPI Table to show the comparison between the selected period and the period prior to the selected one
  - Create two parameters for Year Selection and Category Selection
  - Category parameter includes life insurance share, market share, penetration, ratio of reinsurance accepted, and retention ratio
  - Create a calculated field to calculate the Growth %
  - Create a table to show these values
  - Title should be updated based on the category selection
- 4. Create Growth Indicator Shapes based on the Growth %
  - Growth indicator displays Negative, No Change, and Positive as values and corresponding shapes against it

**Step 9:** Create 2 Parameters, One for **Select Year** and Another **Select Category**.

**Step 10:** To create Parameter go to Down key below Filter button in Data panel, And click on Create Parameter. For Year parameter click on Date datatype and for Select Category Click on String Data type.



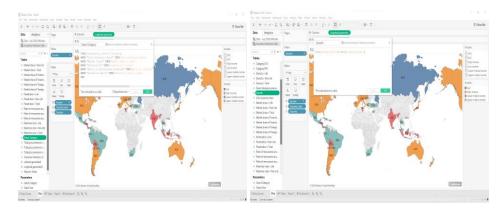
**Step 11:** Create **Calculated Field:** To Select Category, Categorial CY(Current year) and Categorial PY(Previous Year), Growth %.

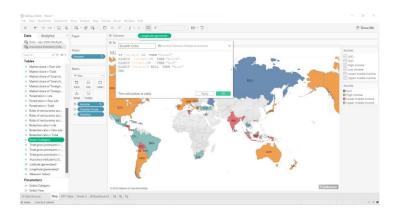
Click on Analysis Pane, and then Calculated Field and do calculations for the following.

Select Category is for: to Select Category Parameter

Categorial CY: Selected Period Value Categorial PY: Comparison Period Value

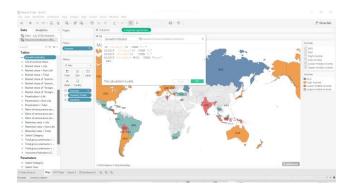
Growth: For Growth %



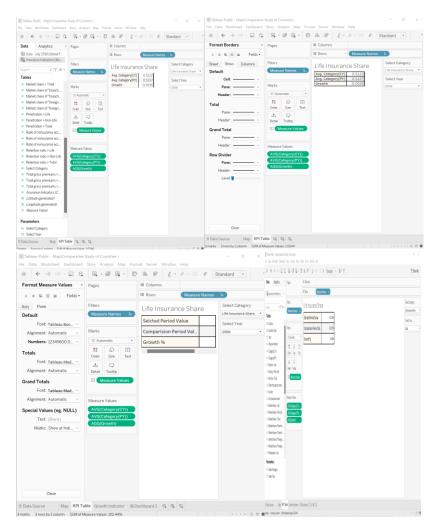


**Step 12:** Create a **KPI Calculator**: Go to new sheet and rename it KPI table and click on Sheet title and insert Select Category Click on Parameters and Show Parameter.





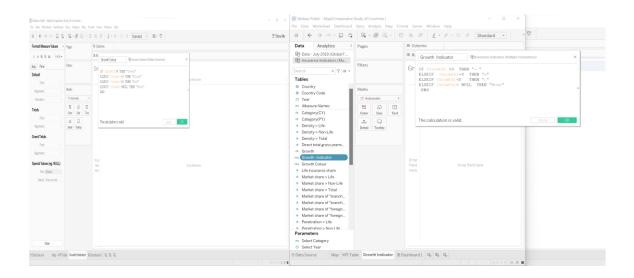
Drag Measure Names to Row and filter it to Categorical CY , Categorial PY , Growth. And Measure Values to Text Mark card.



To convert the number into percentage in the values click on measure values in the mark pane and click format, then select numbers and click into percentage up to two decimals.

# **Step 13:** To create a growth indicator:

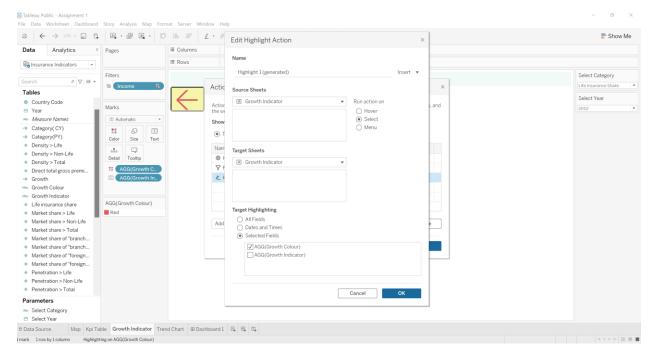
Create 2 Calculated Field: Growth Color and Growth Indicator:



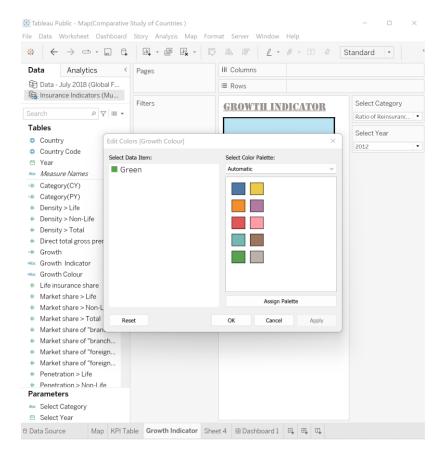
**Step 14:** Growth Indicator Visualization : Go to New Sheet and rename it Growth Indicator Click on Parameters and Show Parameter.

Drag Growth Colour to Colour and Growth Indicator To text.

**Step 15:** To visualize the color of the indicator, click on Action from worksheet then click highlight select the growth indicator for both action and then select growth color.



Select the arrow and right click on the colors edit color to red for red , green for green and blue for null.



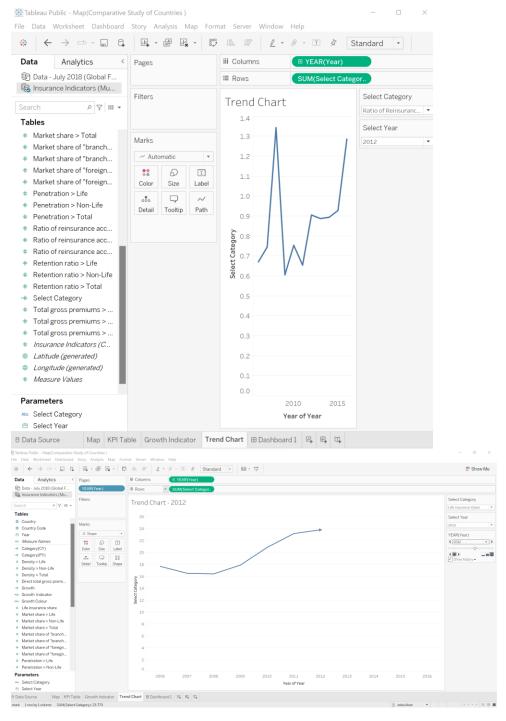
## 5. Create a trend line to show the selected category values

The line shows an arrow or triangle at the last mark

**Step 16:** To Create Trend Chart: Go to New sheet and rename it Trend Chart. Click on Parameters and Show Parameter.

Drag Year to Columns and Select Category Measure to Rows.

Year to Pages [To make a Motion Chart] and click on Show history and Trails.



Edit the shape to arrow and click on show history click all and click on trails. Customize the trend line to include an arrow or triangle at the last data point to indicate the trend direction.

6. Create a dashboard filter for income group to be applied for all charts with the filter action enabled in the map as well.

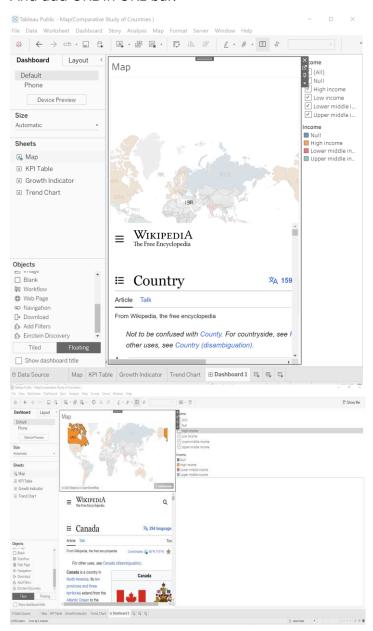
**Step 17:** Create a Dashboard: Click on Dashboard button.

Go to Size and click Automatic.

Go to Objects and click on Horizontal, Then Vertical, and then Horizontal, Drag Map to sheet, From Objects drag web Page to sheet.

Then Go to Dashboard, Click Action -> add action -> go to URL -> edit action-> Source sheet -> Map and Run action -> Select.

And add URL in URL bar.



**Step 18:** Go to Object , the drag Horizontal Tab again.

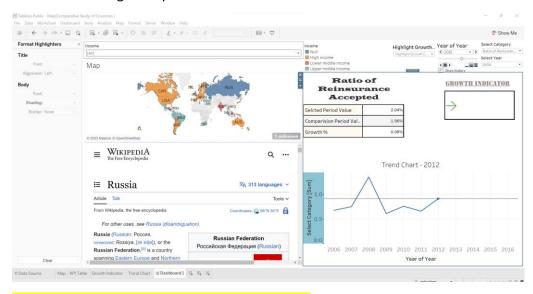
Click on Floating -> add KPI sheet, Growth Indicator sheet and Trend Chart sheet and rearrange it.

Then click on Select Income Filter -> More options -> Apply to Worksheets -> Selected worksheet -> click on All on Dashboard.

Then click on Dashboard -> click on actions -> add action -> filter-> edit filter -> source sheet -> KPI table

Target sheet-> All except KPI table Run on action -> Click on Select.

#### Do the formatting as required:



# 7. Formatting should be done appropriately.

### Step 19: Dashboard ready to slideshow.

