Project description:

Project 1

Problem Statement:

Create a dashboard to do a comparative study on various parameters of different countries using the sample insurance dataset and world development indicators dataset.

Full problem description can be located on simplilearn.com.

Proposed Solution:

Four steps are taken to complete this project:

Step 1: Data connection and Blending

Step 2: Create Calc fields and parameters

Step 3: Creating four worksheets: Income group, KPI (Key performance Indicator), Growth Indicator and Trend Line.

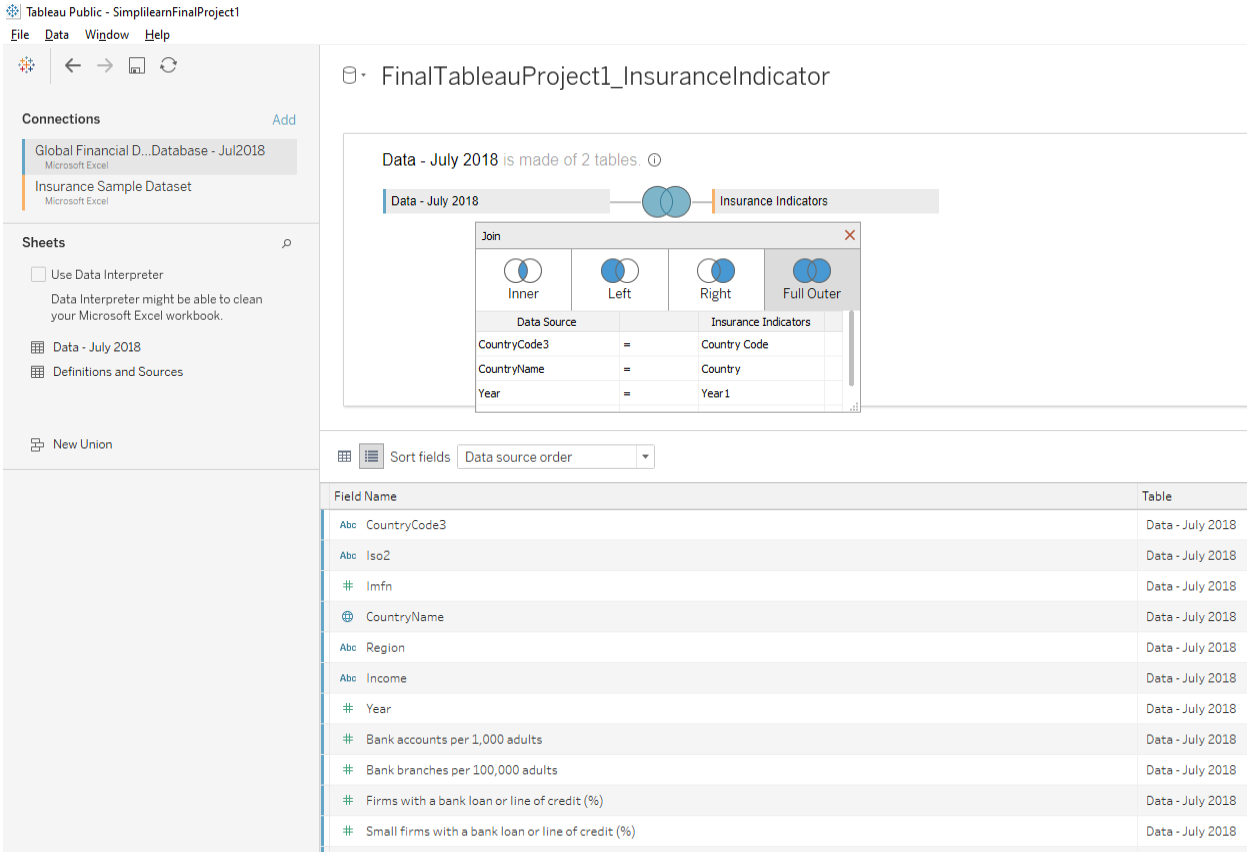
Step 4: Create a dashboard and populate it with the above worksheets, then activate the "Dashboard Actions" to dynamically coordinate calculations and displays in the various worksheets.

I will show my work by copy-paste the Tableau's Sheet Description of each worksheet, as well as the screenshot of the output worksheet. *(Sheet Description is obtained by going to Worksheet == > Describe Sheet, alternatively, Ctrl E for Windows or Cmd E for Mac)*

At the end, the screenshot of the dashboard will also be shown and my Tableau public URL which shows the viz of my work will be provided.

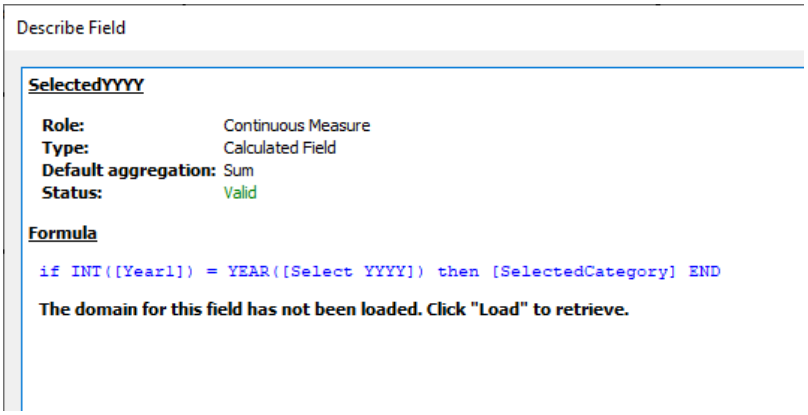
Details description in each step:

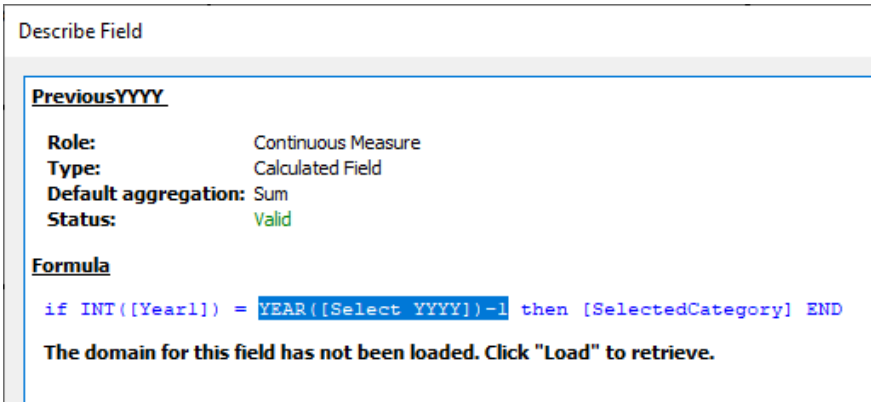
Step 1: Data Source connection and Blending

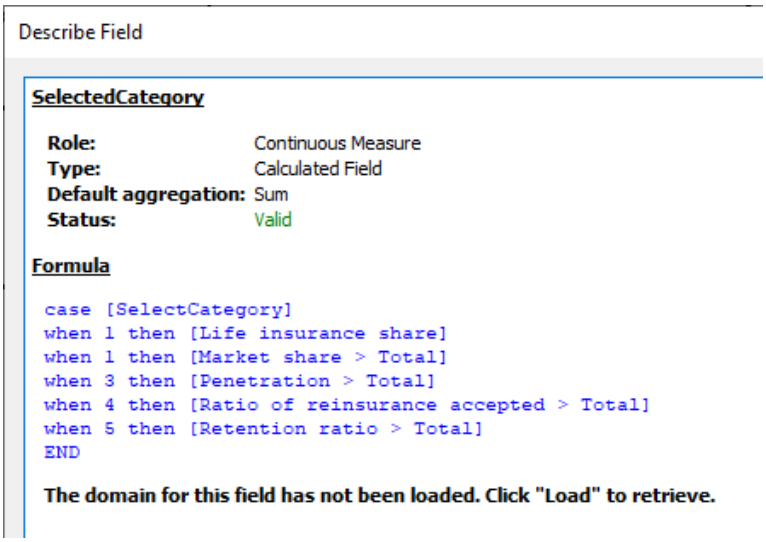


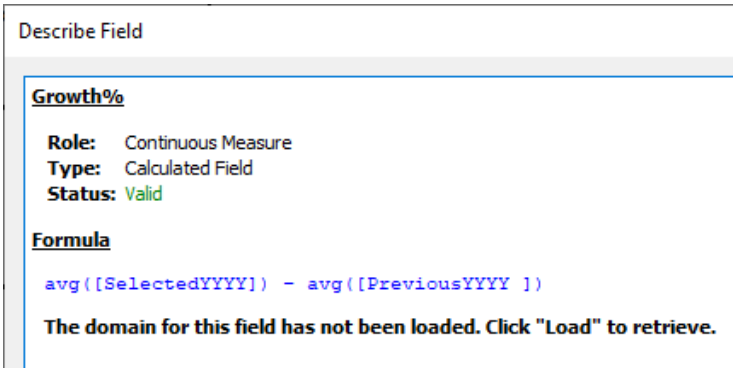
Step 2: Create Calc fields and parameters

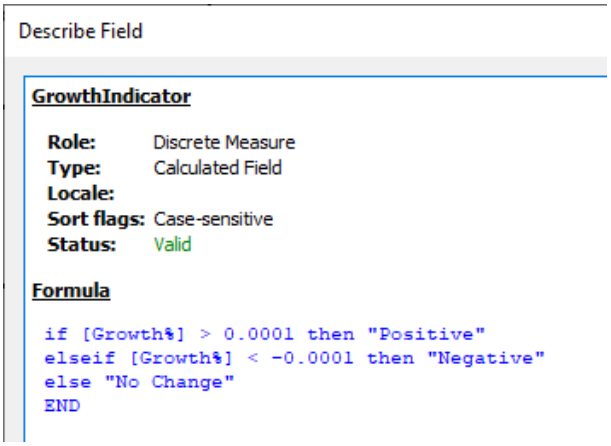
Create 5 calculated fields *(Right-click then Describe to show calc)*



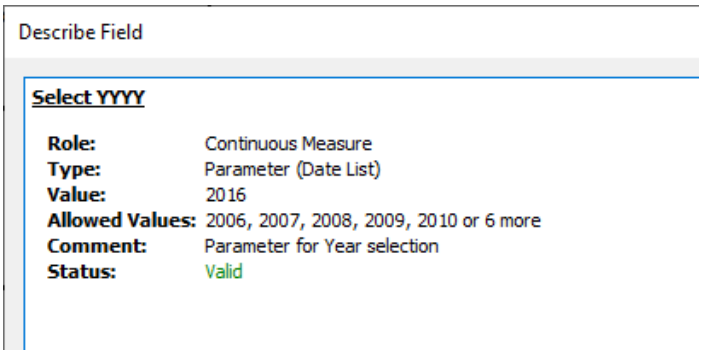


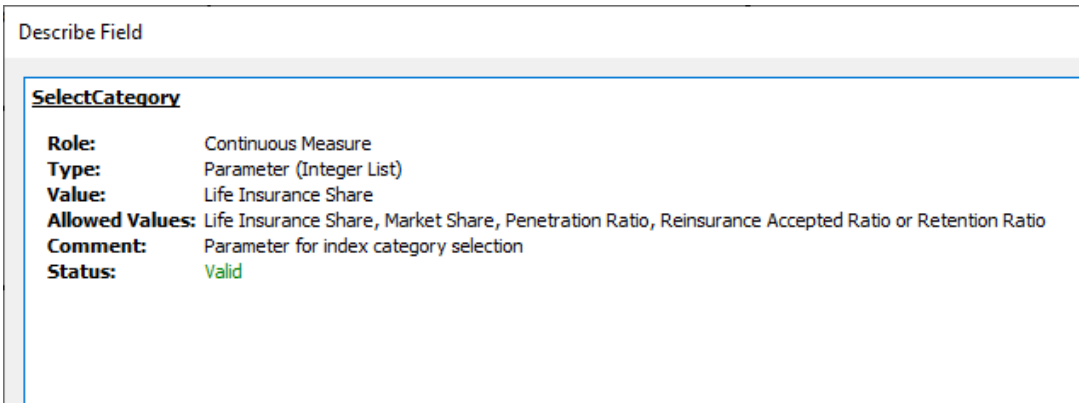






Create 2 parameter *(Right-click then Describe to show allowed values)*





Step 3: Create four (4) worksheets

Worksheet: income_group_map

Description of "income_group_map"

Map based on Longitude (generated) and Latitude (generated). Color shows details about Income. The marks are labeled by CountryName. The view is filtered on Income, Latitude (generated) and Longitude (generated). The Income filter keeps Null, High income, Low income, Lower middle income and Upper middle income. The Latitude (generated) filter keeps all values. The Longitude (generated) filter keeps non-Null values only.

Marks

The mark type is Map.

The marks are labeled by CountryName.

Stacked marks is off.

Shelves

Rows:	Latitude (generated)
Columns:	Longitude (generated)
Filters:	Income, Latitude (generated), Longitude (generated)
Text:	CountryName
Color:	Income

Dimensions

CountryName has 213 members on this sheet

Members: Cameroon; Cuba; Grenada; Macedonia, FYR; New Zealand; ...

Income has 4 members on this sheet

Members: High income; Low income; Lower middle income; Upper middle income

Measures

Geometry (generated) has 213 members on this sheet

Members: MULTIPOLYGON(((-61.4376 12.5298,-61.42 12.5,-61.4327 12.4761,-61.43 12.4589,-61.4566 12.4574,-61.4704 12.4453,-61.4991 12.4746,-61.4827 12.472,-61.4541 12.4884,-61.4499 12.5167,-61.4376 12.5298)),(...

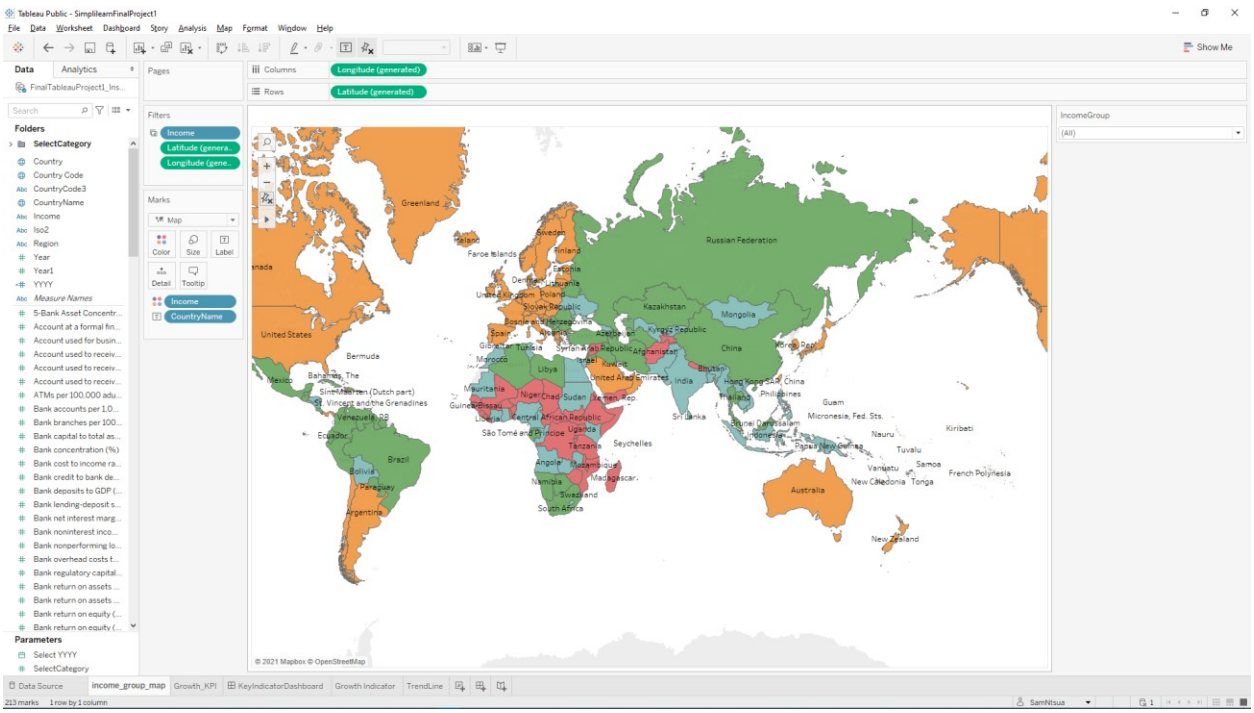
Latitude (generated) ranges from -42.6 to 71.0 on this sheet.

The filter associated with this field keeps all values.

Longitude (generated) ranges from -175.2 to 178.7 on this sheet.

The filter associated with this field keeps non-Null values only.

Screenshot of "income_group_map"



Worksheet: Growth_KPI

Description of "Growth_KPI"

Selected Period Value, Comparison Period Value and Growth%. The data is filtered on Income, which keeps Null, High income, Low income, Lower middle income and Upper middle income.

Marks

The mark type is Text (Automatic).
Stacked marks is on.

Shelves

Rows: Measure Names
Filters: Measure Names, Income
Text: Measure Values

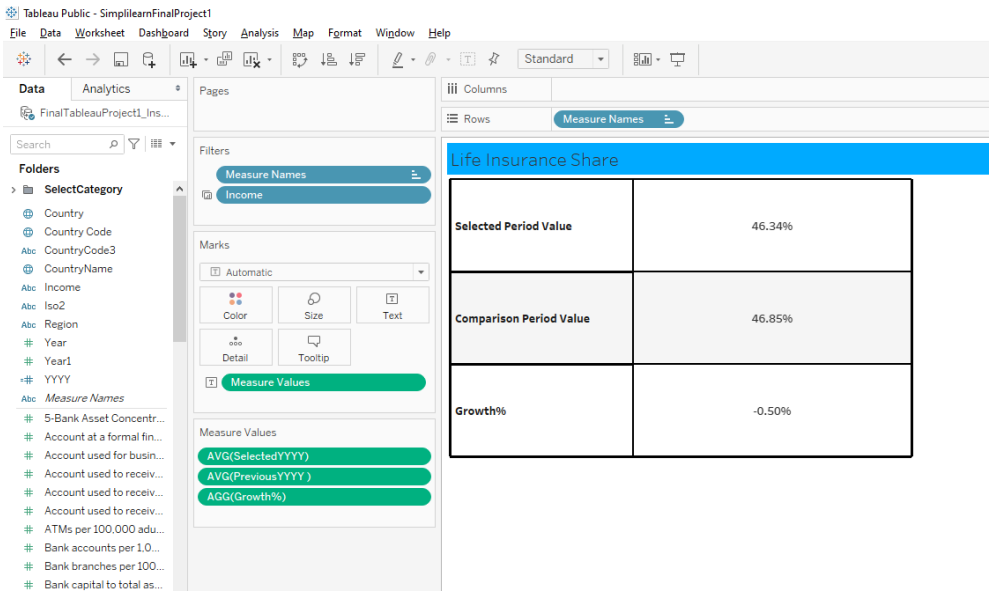
Dimensions

Measure Names has 3 members on this sheet
Members: Comparison Period Value; Growth%; Selected Period Value
Measure Names is sorted manually.
Income has 5 members on this sheet
Members: High income; Low income; Lower middle income; Null; Upper middle income

Measures

Measure Values ranges from -0.0050 to 0.4685 on this sheet.

Screenshot of Growth_KPI



Worksheet: Growth_Indicator

Description of "Growth Indicator"

Shape shows details about GrowthIndicator. The data is filtered on Income, which keeps Null, High income, Low income, Lower middle income and Upper middle income.

Marks

The mark type is Shape.
Stacked marks is on.

Shelves

Filters: Income
Shape: GrowthIndicator

Dimensions

Income has 5 members on this sheet
Members: High income; Low income; Lower middle income; Null; Upper middle income

Measures

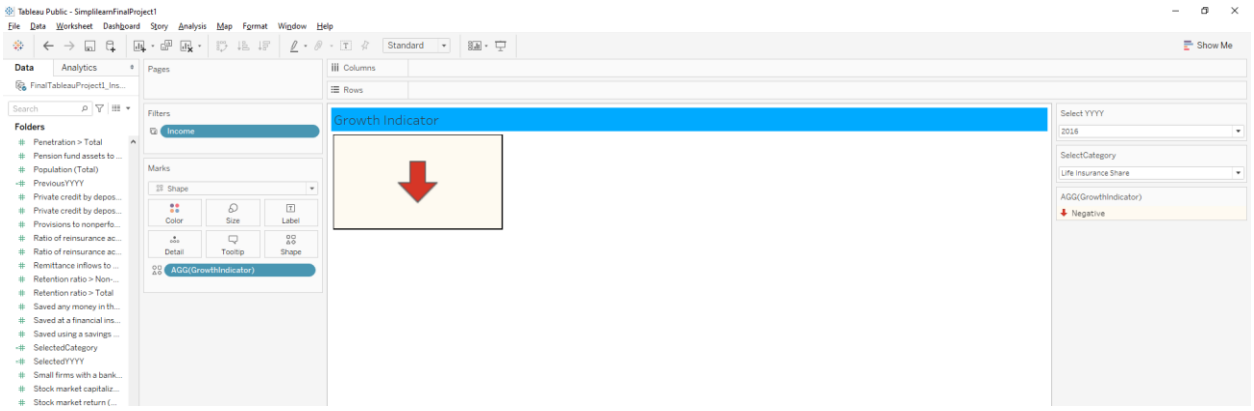
GrowthIndicator has 1 members on this sheet
Members: Negative
The formula is

```
if [Growth%] > 0.0001 then "Positive"

elseif [Growth%] < -0.0001 then "Negative"

else "No Change"

END
```

Parameters

Select YYYY (Parameters) has the value 2016.
SelectCategory (Parameters) has the value Life Insurance Share.

Screenshot of Growth Indicator



Worksheet: TrendLine

Description of "TrendLine"

The plot of average of SelectedCategory for Year1. The data is filtered on Income, which keeps Null, High income, Low income, Lower middle income and Upper middle income.

Marks

The mark type is Shape.
Stacked marks is off.

Shelves

Pages: Year1
Rows: Avg. SelectedCategory
Columns: Year1
Filters: Income

Dimensions

Year1 has 12 members on this sheet
Members: 2007; 2009; 2010; 2013; 2015; ...
Year1 ranges from 2006 to 2016 on this sheet.
Income has 5 members on this sheet
Members: High income; Low income; Lower middle income; Null; Upper middle income

Measures

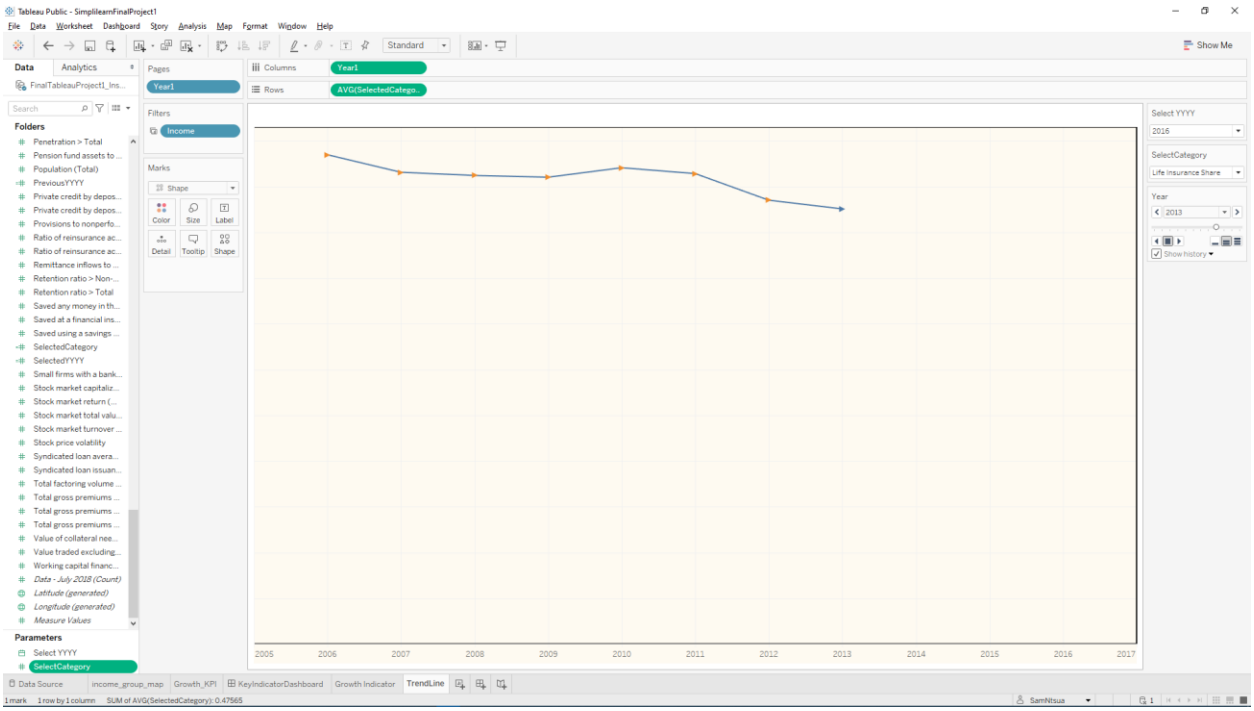
Average of SelectedCategory ranges from 0.46344 to 0.53488 on this sheet.
The formula is

```
case [SelectCategory]

when 1 then [Life insurance share]

when 1 then [Market share > Total]

when 3 then [Penetration > Total]

when 4 then [Ratio of reinsurance accepted > Total]

when 5 then [Retention ratio > Total]

END
```

Parameters

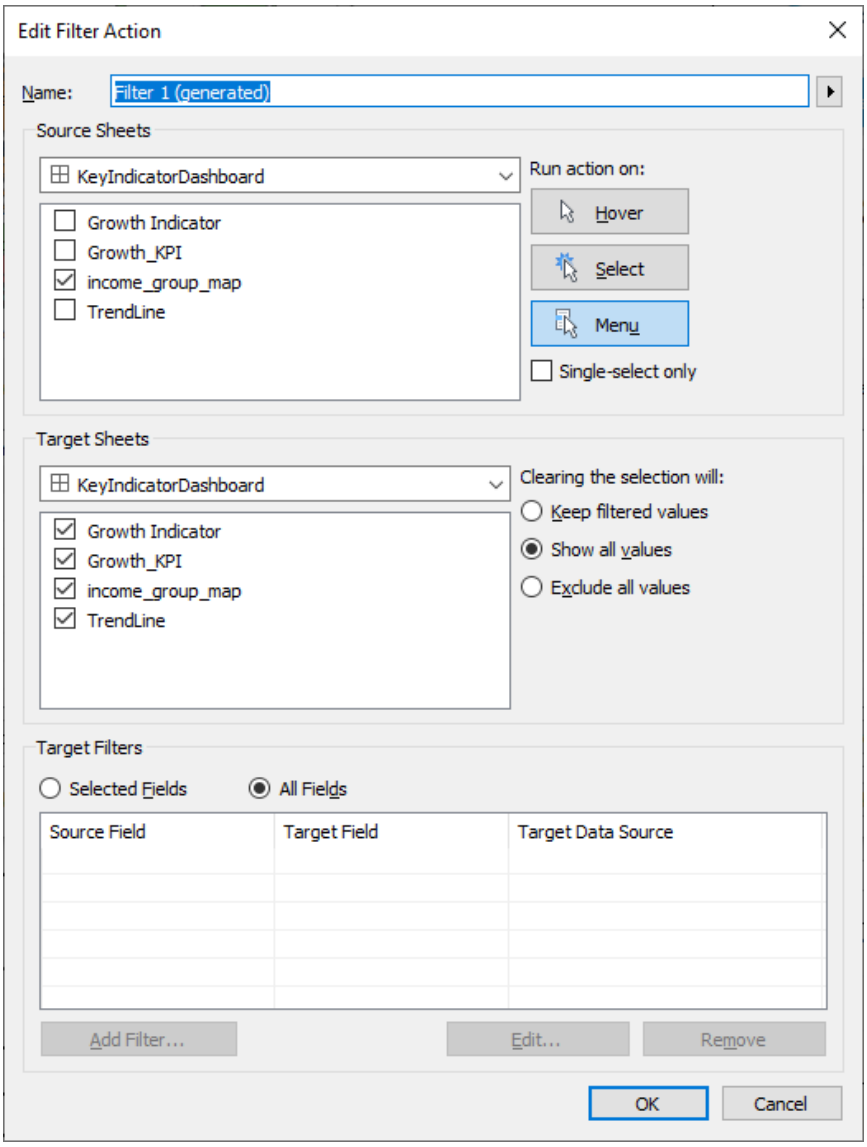
SelectCategory (Parameters) has the value Life Insurance Share.

Screenshot of TrendLine



Step 4: Create a dashboard and activating various worksheets

Actions activations



Dashboard

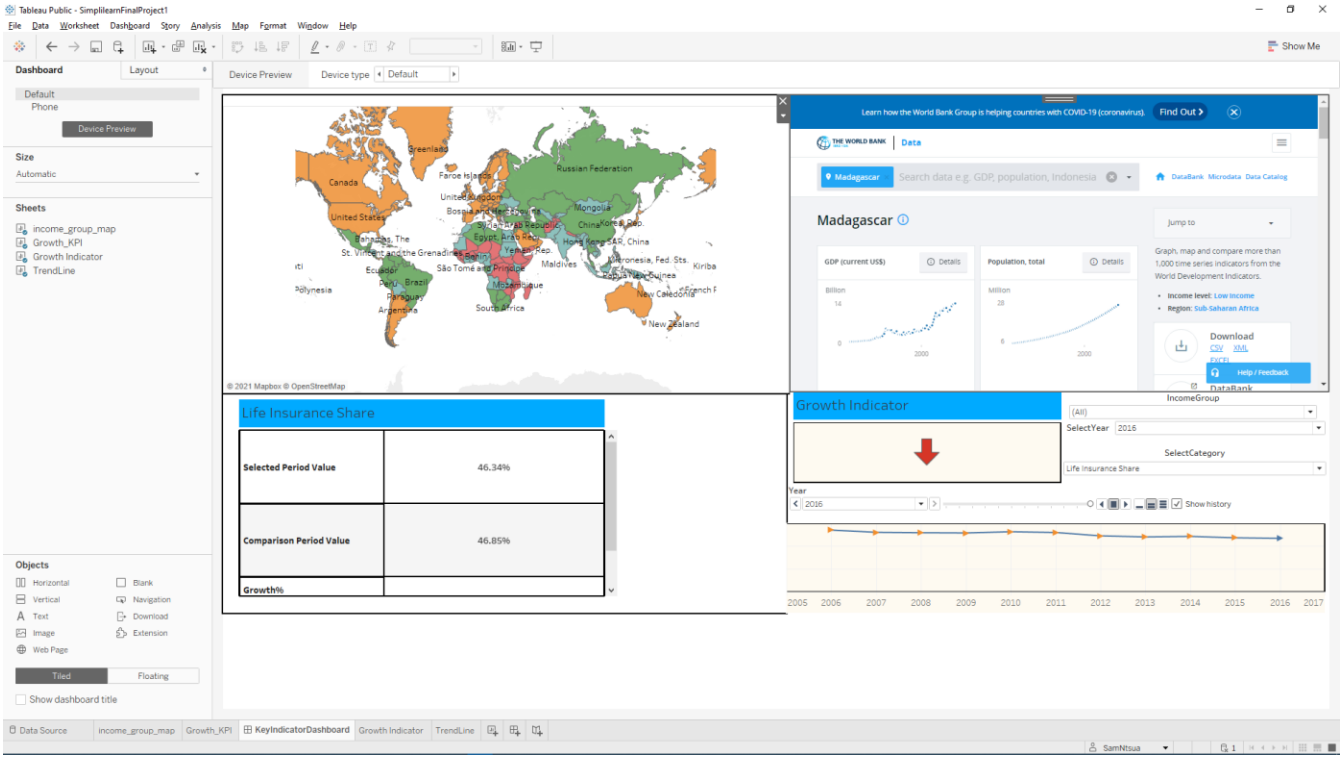


Tableau Public - SimplilearnFinalProject1
File Data Worksheet Dashboard Story Analysis Map Format Window Help
Show Me
Dashboard
Layout
Device Preview
Device type
Default
Phone
Size
Automatic
Sheets
income_group_map
Growth_KPI
Growth Indicator
TrendLine
Objects
Horizontal
Vertical
Text
Image
Web Page
Blank
Navigation
Download
Extension
Tiled
Floating
Show dashboard title
Canada
United States
Greenland
Russian Federation
Mongolia
China
Brazil
Peru
Paraguay
Argentina
South Africa
New Zealand
Madagascar
Life Insurance Share
Selected Period Value
46.34%
Comparison Period Value
46.85%
Growth%
Growth Indicator
IncomeGroup
SelectYear
2016
SelectCategory
Life Insurance Share
Year
Show history
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
Data Source
income_group_map
Growth_KPI
KeyIndicatorDashboard
Growth Indicator
TrendLine