

Power BI Tutorial

Veera Muangsin

Power BI

- A business intelligence software by Microsoft
- <https://powerbi.microsoft.com/>
- <https://community.powerbi.com/t5/Data-Stories-Gallery/bd-p/DataStoriesGallery>



Trade in Europe

a9126030767

250



Global Super Store

mwdadhani

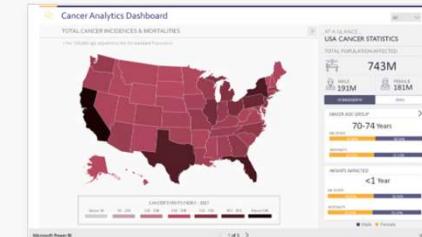
235



Climate Change is Real

ravalib

228



Cancer Analytics

208



Meat, to eat or not to eat? Narrative statistics

a9126030767

180



Executive Insights by Decisive Data

jolsby

179



Pharma Sales Analysis

Anonymous



Inventory Stock Analysis

153

rkarivalagan

Power BI Products

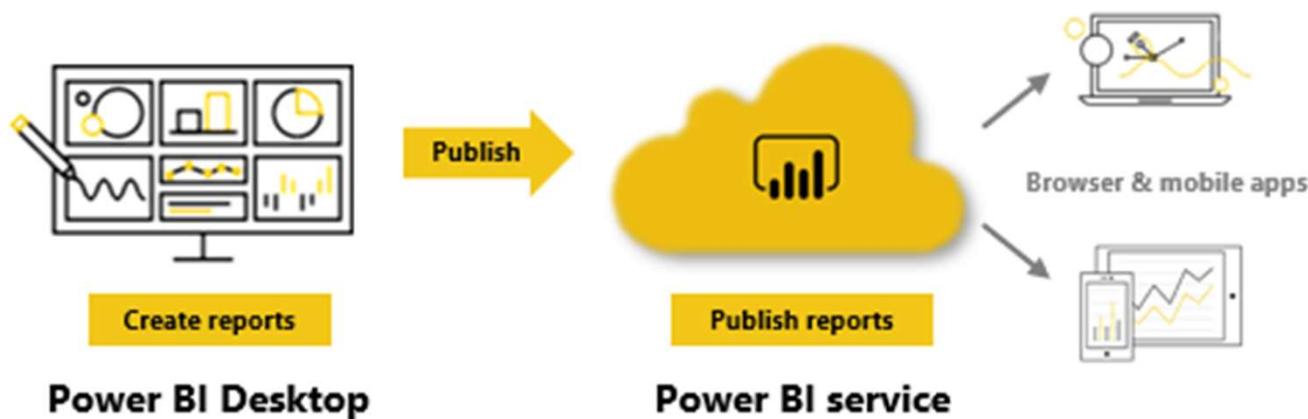
| Product Name | Product Type | OS | Main Usage |
|------------------|-------------------|-----------------------|----------------------------|
| Power BI Desktop | Installed program | Windows | Creating reports |
| Power BI Service | Web app | Any (run on browser) | Sharing reports, dashboard |
| Power BI Mobile | Mobile app | Windows, iOS, Android | Viewing |

License

- [Free](#)
 - Basic cloud services
- Power BI Pro
 - Main features: sharing data and reports with other Pro users
 - \$10/user/month

Power BI Desktop vs Power BI Service

- Power BI Desktop is for creating content. Power BI Service is for sharing content.
- Power BI Service can also create content, but it lacks data preparation and editing features.
- Most users work with Power BI Desktop to produce reports and make them available to the Power BI Service for collaboration and sharing.



Power BI alternatives

- Tableau
 - Desktop app
 - \$75/month, free for students
 - <https://www.tableau.com/academic/students>
- Google Data Studio
 - Web app
 - Free
 - <https://datastudio.google.com/>

How is this tutorial organized?

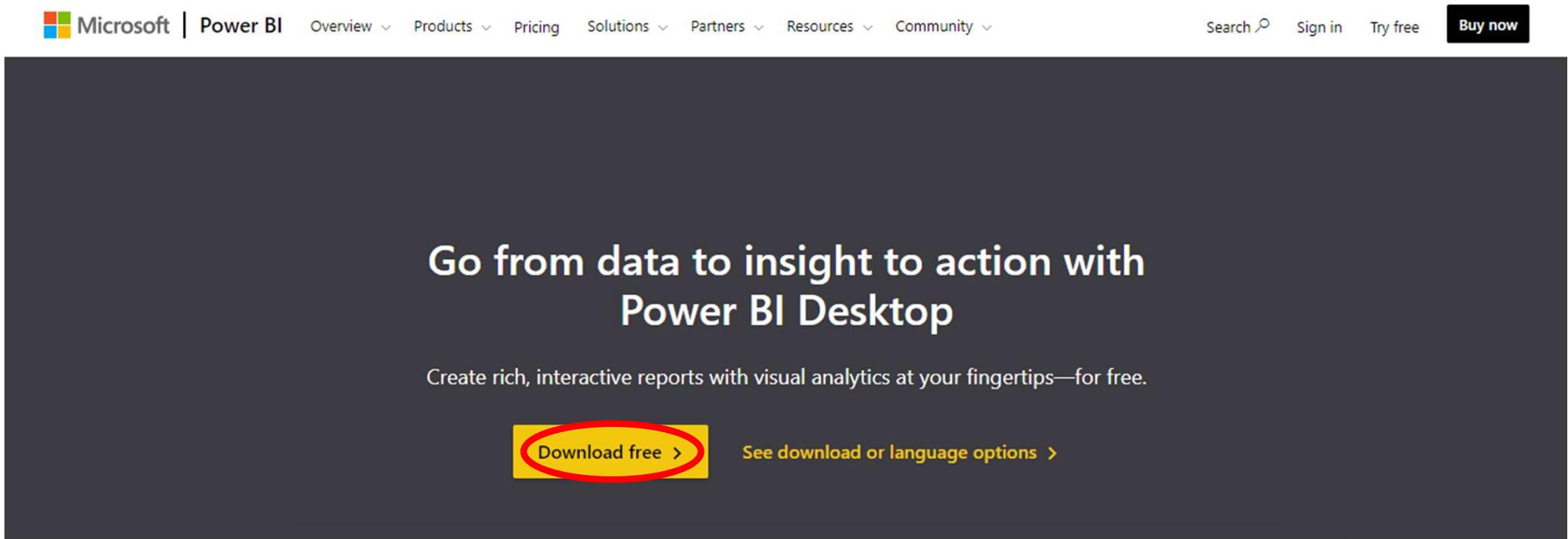
- Most contents are based on Power BI Desktop.
- For non-Windows users, some tutorial for Power BI Service is also given.
 - The differences between desktop and online versions are mostly related to storage. The main application is quite the same.
- Due to frequent updates, the screen-captured images may be different from the current version of the program.

Getting Started with Power BI Desktop

For *Getting Started with Power BI Service* [click here](#)

Power BI Desktop

- <https://powerbi.microsoft.com/en-us/desktop/>



The screenshot shows the Microsoft Power BI Desktop landing page. At the top, there is a navigation bar with the Microsoft logo, a 'Power BI' button, and links for 'Overview', 'Products', 'Pricing', 'Solutions', 'Partners', 'Resources', and 'Community'. To the right of the navigation bar are 'Search', 'Sign in', 'Try free', and a 'Buy now' button. The main content area features a dark background with white text. The headline reads 'Go from data to insight to action with Power BI Desktop'. Below the headline is a subtext: 'Create rich, interactive reports with visual analytics at your fingertips—for free.' At the bottom, there are two calls-to-action: a yellow button with a red oval highlighting the 'Download free >' link, and a link 'See download or language options >'. The entire screenshot is framed by a thick black border.

Microsoft | Power BI Overview Products Pricing Solutions Partners Resources Community

Search Sign in Try free Buy now

Go from data to insight to action with
Power BI Desktop

Create rich, interactive reports with visual analytics at your fingertips—for free.

Download free > See download or language options >

Power BI Desktop: first page

The screenshot shows the Microsoft Power BI Desktop application window. The title bar reads "Untitled - Power BI Desktop". The ribbon menu is visible with tabs: File, Home (selected), Insert, Modeling, View, and Help. The Home tab contains various icons for data management (Clipboard, Paste, Cut, Copy, Format painter), data sources (Get data from workbook, Excel, Power BI Server, SQL Server, Enter data, Recent sources), and report creation (New visual, Text box, More visuals, Transform data, Refresh data, Insert, Calculations, Sensitivity, Share). On the left, there's a vertical pane with icons for reports, queries, and fields. The main workspace has a dotted border and displays the message "Add data to your report" and "Once loaded, your data will appear in the Fields pane." It includes four buttons: "Import data from Excel" (highlighted in green), "Import data from SQL Server", "Paste data into a blank table", and "Try a sample dataset". Below these is a link "Get data from another source →". The bottom navigation bar shows "Page 1" and a yellow "+" button. To the right, a "Visualizations" pane lists various chart and matrix types, and a "Fields" pane shows settings for "Build visual", "Values", "Drill through", "Cross-report" (off), "Keep all filters" (on), and "Add drill-through fields here".

Samples

<https://learn.microsoft.com/en-us/power-bi/create-reports/sample-datasets#download-original-sample-pbix-power-bi-files>

Download original sample .pbix Power BI files

Six of the built-in samples are also available as Power BI *.pbix* files. The *.pbix* files are designed to be used with Power BI Desktop.

1. Download the files individually using these links. Selecting these links saves the file automatically to your Downloads folder.

- [Customer Profitability Sample PBIX](#)
- [Human Resources Sample PBIX](#)
- [Procurement Analysis Sample PBIX](#)
- [Retail Analysis Sample PBIX](#)
- [Sales and Marketing Sample PBIX](#)
- [Supplier Quality Analysis Sample PBIX](#)

2. In Power BI Desktop, select **File > Open**, navigate to the location where you saved the sample *.pbix* file, and select the *.pbix* file to open it in Power BI Desktop.

Retail Analysis Sample PBIX

This screenshot shows the Power BI Desktop interface for the "Retail Analysis Sample PBIX" file. The top navigation bar includes File, Home, Insert, Modeling, View, and Help tabs. The Home tab is selected. The ribbon below has sections for Clipboard, Data, Queries, Insert, Calculations, Sensitivity, and Share.

The main workspace contains a dark rectangular area with attribution text from obviEnce and a copyright notice. The right side of the screen features several panes:

- Filters**: Contains search fields for "Search" and "Add data fields here" for filters on this page and all pages.
- Visualizations**: Shows a grid of visualization icons including bar charts, line graphs, and maps. A "Build visual" button is also present.
- Fields**: Displays a search field and lists of fields categorized by type: Sales, District, Item, Store, and Time.

At the bottom of the screen, a page selector shows tabs for Info, Overview (which is highlighted with a red circle), District Monthly Sales, New Stores, and a plus sign. The status bar at the bottom left indicates "Page 1 of 4".

Retail Analysis Sample PBIX

Retail Analysis Sample PBIX - Power BI Desktop

Veera Muangsin

File Home Insert Modeling View Help

Cut Copy Format painter Paste

Get data workbook hub Data SQL Server Enter data Dataverse Recent sources

Transform data Refresh data New visual Text box More visuals

New measure Quick Sensitivity measure Sensitivity

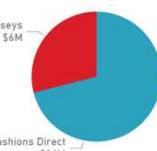
Transform data Refresh data New visual Text box More visuals

Transform data Refresh data New visual Text box More visuals

Clipboard Data Queries Insert Calculations Share

Store Sales Overview

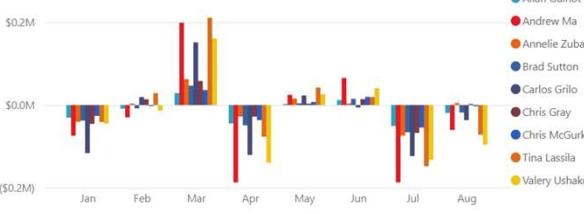
This Year Sales by Chain



10 New Stores

104 Total Stores

Total Sales Variance by FiscalMonth and District Manager



DM: Allan Guinot, Andrew Ma, Annelie Zubar, Brad Sutton, Carlos Grillo, Chris Gray, Chris McGurk, Tina Lasila, Valery Ushakov

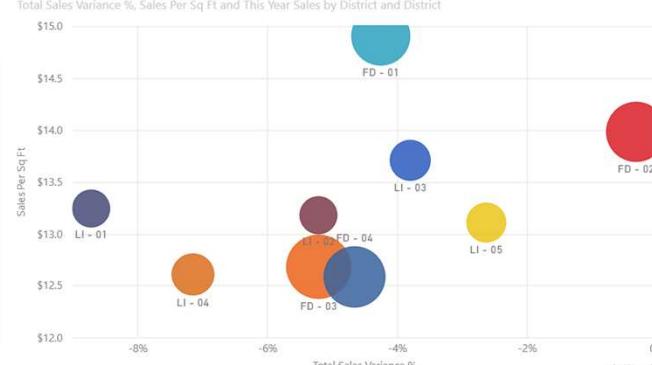
This Year Sales by PostalCode and Store Type

Store Type: New Store (blue), Same Store (red)



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Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District



Filters

Search

Filters on this page

- Chain is (All)
- City is (All)
- District is (All)
- Name is (All)
- Open Month is (All)
- Store Type is (All)

Add data fields here

Values

Drill through

Cross-report

Keep all filters

Add drill-through fields here

Visualizations

Build visual

Sales District Item Store Time

Data

Search

Info Overview District Monthly Sales New Stores +

Page 2 of 4

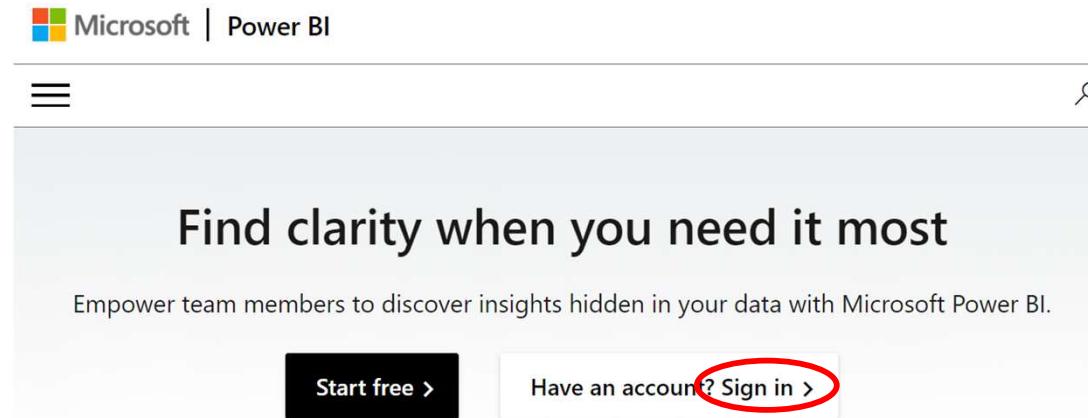
Getting Started with Power BI Service

For *Getting Started with Power BI Desktop* [click here](#)

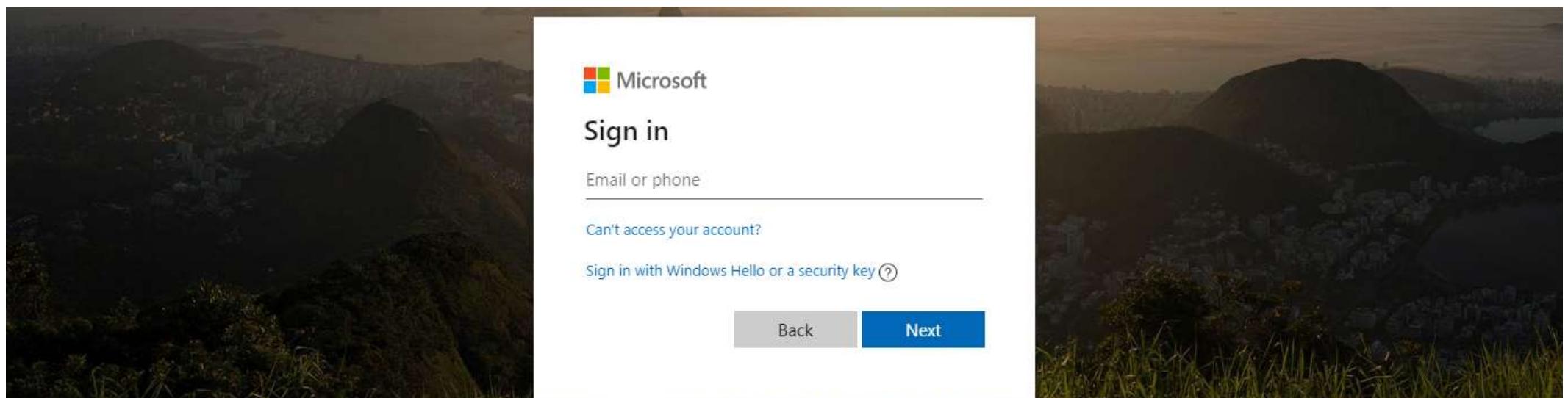
Power BI Service

<https://app.powerbi.com>

<https://powerbi.microsoft.com/en-us/>



Sign-in with Office 365 account



Microsoft Office365 at Chula

- About Microsoft Office365
<https://www.it.chula.ac.th/en/service/en-office365/>
- Sign-in with student account
65xxxxxxxx@student.chula.ac.th
- Same password as CUNET account

Power BI Service: Home

https://app.powerbi.com/home

Power BI Home

+ New report

Search

New items saved to: My workspace

Recommended

You frequently open this

You frequently open this

Retail Analysis Sample

My workspace

Getting started with Power BI

Explore basic Power BI concepts

Explore this data story

Explore the 100 most useful produ...

Cancer statistics

Recent

Favorites

My apps

Filter by keyword

Filter

| Name | Type | Opened | Location | Endorsement | Sensitivity |
|-------------------------------------|-----------|--------|--------------|-------------|-------------|
| Retail Analysis Sample | Report | now | My workspace | — | — |
| income_vs_lifeexpectancy_table.xlsx | Dashboard | now | My workspace | — | — |
| My workspace | Workspace | now | Workspaces | — | — |

Get a sample report

The screenshot shows the Power BI Learn center interface. On the left, a vertical sidebar lists navigation options: Home, Create, Browse, Data hub, Metrics, Apps, Learn (which is highlighted with a red circle and labeled '1'), and Workspaces. Below this is 'My workspace'. The main content area is titled 'Learning center' and describes it as 'Your hub for all Power BI training'. It features three main sections: 'Learn how to use Power BI' (with a 'Start learning' button), 'Dig into the documentation' (with a 'Read docs' button), and 'Join the Power BI community' (with a 'Join in' button). At the bottom, there's a section titled 'Sample reports' displaying three sample reports: 'Retail Analysis Sample', 'Sales and Marketing Sample', and 'Supplier Quality Analysis Sample'. The 'Retail Analysis Sample' is circled with a red arrow and labeled '3'. To the right of the sample reports is a navigation icon with arrows (circled with a red arrow and labeled '2').

1

2

3

<https://learn.microsoft.com/en-us/power-bi/create-reports/sample-retail-analysis#get-the-built-in-sample-in-the-power-bi-service>

Report

Power BI My workspace Retail Analysis Sample | Data updated 4/10/23

Search

Pages Edit

Overview

District Monthly Sales

New Stores

District Sales Report

This Year Sales by Chain

Lindseys \$6M

Fashions Direct \$16M

10 New Stores

104 Total Stores

This Year Sales by PostalCode and Store Type

Store Type: ● New Store ● Same Store

Total Sales Variance by FiscalMonth and District Manager

District Manager:

- Allan Guinot
- Andrew Ma
- Annelie Zubar
- Brad Sutton
- Carlos Grilo
- Chris Gray
- Chris McGurk
- Tina Lassila
- Valery Ushakov

Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District

Sales Per Sq Ft

Total Sales Variance %

Legend:

- FD - 01
- LI - 01
- LI - 02
- LI - 03
- LI - 04
- LI - 05
- FD - 02
- FD - 03
- FD - 04

Filters

Filters on this page

- Chain is (All)
- City is (All)
- District is (All)
- Name is (All)
- Open Month is (All)
- Store Type is (All)

Search

Report: Edit mode

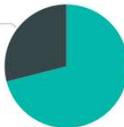
Power BI My workspace Retail Analysis Sample | Data updated 4/10/23

File View Reading view Mobile layout

Home Create Browse Data hub Metrics Apps Learn Workspaces My workspace

Store Sales Overview

This Year Sales by Chain



Lindsey's \$6M
Fashions Direct \$16M

10 New Stores

104 Total Stores

Total Sales Variance by FiscalMonth and District Manager



District Manager: Allan Guinot, Andrew Ma, Annelie Zubar, Brad Sutton, Carlos Grilo, Chris Gray, Chris McGurk, Tina Lassila, Valery Ushakov

This Year Sales by PostalCode and Store Type



Store Type: New Store (green), Same Store (grey)

Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District



Sales Per Sq Ft: LI - 01 (\$13), LI - 02 (\$14), LI - 03 (\$14), LI - 04 (\$13), LI - 05 (\$13), FD - 01 (\$15), FD - 02 (\$14), FD - 03 (\$14), FD - 04 (\$14), FD - 05 (\$14)

Total Sales Variance %: LI - 01 (-0%), LI - 02 (-0%), LI - 03 (-4%), LI - 04 (-0%), LI - 05 (-2%), FD - 01 (0%), FD - 02 (0%), FD - 03 (-4%), FD - 04 (-4%), FD - 05 (-2%)

Filters

Search: Search

Filters on this page

- Chain is (All)
- City is (All)
- District is (All)
- Name is (All)
- Open Month is (All)
- Store Type is (All)

Add data fields here

Values

Build visual

Visualizations

Data

Search

Sales

District

Item

Store

Time

Drill through

Cross-report

Keep all filters

Add drill-through fields here

Filters on all pages

Add data fields here

Overview District Monthly Sales New Stores District Sales Report +

Page 1 of 4

Upload a report file (.pbix)

The screenshot shows the Power BI 'My workspace' interface. On the left, a sidebar includes icons for Home, Create, Browse, Data hub, Metrics, Apps, Learn, Workspaces, and 'My workspace' (which is circled in red). The main area has a search bar and navigation tabs for 'View' and 'Filters'. A prominent 'Upload' button is highlighted with a red circle. A dropdown menu from this button lists 'OneDrive for Business', 'SharePoint', and 'Browse'. The 'Browse' option is also circled in red and has a red arrow pointing to it from below. The main content area displays a table of datasets and dashboards. In the bottom right corner of the main area, a file selection dialog is open, showing 'Retail Analysis Sample.pbix' selected in a list of files. The 'Open' button in this dialog is also circled in red and has a red arrow pointing to it from below.

| All | Type | Owner | Refreshed | Next refresh | Endorsement | Sensitivity |
|--------------------------|----------------|----------------|----------------------|--------------|-------------|-------------|
| co | Dataset | Veera Muangsin | 3/31/22, 11:24:52 AM | N/A | — | — |
| covid19.csv | Dashboard | Veera Muangsin | — | — | — | — |
| income_vs_lifeexpectancy | Dataset | Veera Muangsin | 3/31/22, 11:18:25 AM | N/A | — | — |
| income_vs_lifes | File folder | Veera Muangsin | 4/10/2023 11:33 AM | — | — | — |
| RainDaily_Tabu | File folder | Veera Muangsin | 4/10/2023 11:33 AM | — | — | — |
| RainDaily_Tabu | Microsoft.P... | 1,161 KB | — | — | — | — |
| Windows-SSD (C:) | Microsoft.P... | 13,302 KB | — | — | — | — |
| Network | Microsoft.P... | — | — | — | — | — |

File name: Retail Analysis Sample.pbix

Custom files (*.xlsx;*.pbix;*.rdl)

Open Cancel

Open a report file in My workspace

The screenshot shows the Power BI 'My workspace' interface. On the left is a vertical navigation bar with icons for Home, Create, Browse, Data hub, Metrics, Apps, Learn, Workspaces, and 'My workspace'. The 'My workspace' icon is circled in red. The main area is titled 'My workspace' and contains a search bar and filter options. Below is a table listing items:

| All | Name | Type | Owner | Refreshed | Next refresh | Endorsement | Sensitivity |
|-----|-------------------------------------|-----------|----------------|----------------------|--------------|-------------|-------------|
| | covid19 | Dataset | Veera Muangsin | 3/31/22, 11:24:52 AM | N/A | — | — |
| | covid19.csv | Dashboard | Veera Muangsin | — | — | — | — |
| | income_vs_lifeexpectancy_table | Dataset | Veera Muangsin | 3/31/22, 11:18:25 AM | N/A | — | — |
| | income_vs_lifeexpectancy_table.xlsx | Dashboard | Veera Muangsin | — | — | — | — |
| | RainDaily_Tabular | Dataset | Veera Muangsin | 3/30/22, 11:23:01 PM | N/A | — | — |
| | RainDaily_Tabular.csv | Dashboard | Veera Muangsin | — | — | — | — |
| | Retail Analysis Sample | Dashboard | Veera Muangsin | — | — | — | — |
| | Retail Analysis Sample | Report | Veera Muangsin | 3/30/22, 2:59:46 PM | — | — | — |
| | Retail Analysis Sample | Dataset | Veera Muangsin | 3/30/22, 2:59:46 PM | N/A | — | — |

Right click → Open link in new tab

Learn from Example

Both Power BI Desktop and Power BI Service have similar interface.

The slides are based on Power BI Desktop.

The interface may be a bit different to the current version.

Report Editor Panes

The screenshot shows the Power BI Desktop interface with the following components:

- Report Canvas:** The main workspace where visualizations are displayed. It includes:
 - A pie chart titled "This Year Sales by Chain" showing "Lindsey" at \$4M and "Fashion Direct" at \$16M.
 - A map titled "This Year Sales by PostalCode and Store Type" showing store locations across the United States.
 - Text elements: "10 New Stores" and "104 Total Stores".
 - A bar chart titled "Retail Sales Variance by FiscalMonth and District Manager" showing sales variance from Jan to Aug for various district managers.
 - A bubble chart titled "Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and Chain" showing sales variance percentage and square footage for different districts and chains.
- Ribbon Menu:** Located at the top, it includes File, Home, Insert, Modeling, View, Help, and various icons for data management and publishing.
- Search Bar:** A search bar at the top center.
- Filters Panel:** A sidebar on the right labeled "Filters" with sections for "Filters on this page" (Chain, City, District, Name, Open Month, Store Type) and "Filters on all pages".
- Visualizations Panel:** A sidebar on the right labeled "Visualizations" showing icons for different visualization types.
- Fields Panel:** A sidebar on the right labeled "Fields" showing a hierarchy of fields: Sales, District, Item, Store, and Time.

Show/Hide Panes

Screenshot of Power BI Desktop showing the Home tab selected. The ribbon includes File, Home, Insert, Modeling, View, and Help. The toolbar includes Get data, Refresh, New visual, New measure, Sensitivity (preview), and Publish.

The main area displays a dashboard titled "Store Sales Overview" with four visualizations:

- A pie chart titled "This Year Sales by Chain" showing "Lindsey \$6M" and "Fantasia Direct \$14M".
- A bar chart titled "Total Sales Variance by Fiscal Month and District Manager" showing monthly sales variance from January to August for various district managers.
- A map titled "This Year Sales by PostCode and Store Type" showing store locations across the United States.
- A bubble chart titled "Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District" showing sales variance, square footage, and district distribution.

On the right side, there are three panes with red circles around their close buttons:

- Filters**: Contains sections for Filters on this page (Chain, City, District, Name, Open Month, Store Type) and Drill through (Cross-report, Off, Keep all filters On).
- Visualizations**: Shows a list of available visualizations.
- Fields**: Shows a list of available fields under Sales, District, Item, Store, and Time categories.

At the bottom, tabs include Info, Overview (selected), District Monthly Sales, and New Stores. A yellow plus button is also present.

Page Selection

Retail Analysis Sample PBIX - Power BI Desktop

Search

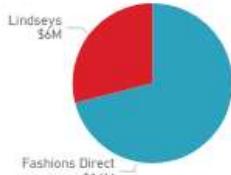
Sign in

File Home Insert Modeling View Help

Get data Refresh New visual New measure Sensitivity (preview) Publish

Store Sales Overview

This Year Sales by Chain



Lindsey's \$6M
Fashions Direct \$16M

10 New Stores

104 Total Stores

Total Sales Variance by FiscalMonth and District Manager



DM Allan Guinot, Andrew Ma, Annelie Zubair, Brad Sutton, Carlos Grilo, Chris Gray, Chris McGurk, Tina Lassila, Valery Ushakov

This Year Sales by PostalCode and Store Type

Store Type ● New Store ○ Same Store



SOUTH DAKOTA WISCONSIN MICHIGAN IOWA NEBRASKA KANSAS OREGON ARKANSAS MISSOURI TENNESSEE ALABAMA GEORGIA FLORIDA SOUTH CAROLINA MARYLAND DELAWARE NEW JERSEY NEW YORK CONNECTICUT MASSACHUSETTS RHODE ISLAND VENUE NEW HAMPSHIRE MAINE NOVA SCOTIA

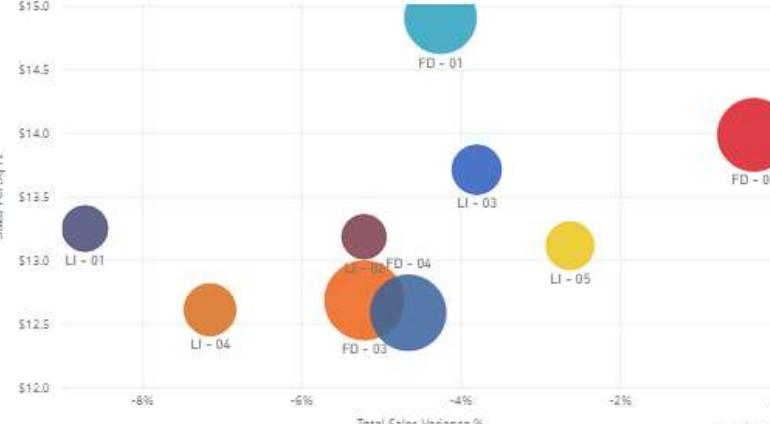
UNITED STATES

Bing

Sergasso Sea

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Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District



Sales per Sq Ft

Total Sales Variance %

LI - 01
FD - 01
LI - 02
LI - 03
LI - 04
FD - 03
FD - 04
LI - 05

Overview District Monthly Sales New Stores +

Page 2 of 4

Page Selection

Retail Analysis Sample PBIX - Power BI Desktop

File Home Insert Modeling View Help

Get data Refresh New visual New measure Sensitivity (preview) Publish

District Monthly Sales

District Manager

- Allan Guinot
- Andrew Ma
- Annelie Zubar
- Brad Sutton
- Carlos Grilo
- Chris Gray
- Chris McGurk
- Tina Lassila
- Valery Ilichakov

This Year Sales by StoreNumberName

| Store Number | Sales (\$M) |
|--------------|-------------|
| 10 - St... | \$0.41M |
| 11 - Ce... | \$0.49M |
| 12 - Ke... | \$0.41M |
| 13 - Ch... | \$0.64M |
| 14 - Ha... | \$0.57M |
| 15 - YoR... | \$0.32M |
| 16 - Wi... | \$0.50M |
| 17 - Wa... | \$0.52M |
| 18 - Wi... | \$0.45M |
| 19 - Bel... | \$0.37M |
| 20 - Gr... | \$0.49M |
| 21 - Za... | \$0.32M |
| 22 - Wi... | \$0.45M |
| 23 - Eri... | \$0.39M |
| 24 - No... | \$0.50M |
| 25 - Ma... | \$0.40M |
| 26 - AKI... | \$0.57M |
| 27 - Bo... | \$0.35M |
| 28 - Hu... | \$0.42M |
| 29 - Back... | \$0.40M |
| 30 - Me... | \$0.35M |
| 31 - Mi... | \$0.40M |
| 32 - Sh... | \$0.35M |
| 33 - Alt... | \$0.40M |
| 34 - Mo... | \$0.42M |
| 35 - Sh... | \$0.14M |
| 36 - Be... | \$0.42M |
| 37 - No... | \$0.51M |
| 38 - Lex... | \$0.16M |
| 39 - Mo... | \$0.42M |
| 40 - Fair... | \$0.42M |
| 41 - St... | \$0.42M |

Total Sales Variance % by FiscalMonth

| Month | Variance (%) |
|-------|--------------|
| Jan | -10% |
| Feb | 0% |
| Mar | 30% |
| Apr | 5% |
| May | 10% |
| Jun | 10% |
| Jul | -10% |
| Aug | 5% |

Last Year Sales and This Year Sales by FiscalMonth

| Month | Last Year Sales (\$M) | This Year Sales (\$M) |
|-------|-----------------------|-----------------------|
| Jan | 2.5 | 2.0 |
| Feb | 2.8 | 3.0 |
| Mar | 3.5 | 4.0 |
| Apr | 3.2 | 3.5 |
| May | 3.0 | 3.2 |
| Jun | 3.5 | 3.8 |
| Jul | 3.2 | 3.0 |
| Aug | 3.8 | 4.0 |

Total Sales Variance %, Avg \$/Unit TV and This Year Sales by Category and Category

| Category | Avg \$/Unit TV | Total Sales Variance % |
|-----------------|----------------|------------------------|
| 010-Womens | \$10 | -30% |
| 020-Mens | \$8 | -10% |
| 030-Kids | \$5 | 0% |
| 040-Juniors | \$5 | -10% |
| 050-Shoes | \$12 | 0% |
| 060-Intimate | \$3 | -10% |
| 070-Hosiery | \$2 | -20% |
| 080-Accessories | \$8 | 5% |
| 090-Home | \$5 | 0% |
| 100-Groceries | \$2 | 0% |

Info Overview District Monthly Sales New Stores +

Page 3 of 4

Creating a New Page

Retail Analysis Sample PBIX - Power BI Desktop

Search Sign in

File Home Insert Modeling View Help

Get data Refresh New visual New measure Sensitivity (preview) Publish

New Stores Analysis

This Year Sales by City and Chain

Open Store Count by Open Month and Chain

| Month | Chain | Open Store Count |
|-------|-----------------|------------------|
| Jan | Fashions Direct | 1 |
| Feb | Fashions Direct | 2 |
| Mar | Fashions Direct | 1 |
| Apr | Fashions Direct | 1 |
| May | Lindseys | 2 |
| Jun | Fashions Direct | 1 |
| Jul | Lindseys | 1 |

Sales Per Sq Ft by Name

| Name | Sales Per Sq Ft |
|------------------------------|-----------------|
| Cincinnati 2 Fashions Direct | \$12.86 |
| Ft. Oglethorpe Lindseys | \$12.26 |
| Knoxville Lindseys | \$14.75 |
| Monroeville Fashions Direct | \$14.93 |
| Pasadena Lindseys | \$10.92 |
| Sharonville Fashions Direct | \$17.92 |
| Washington Fashions Direct | \$14.25 |
| Wilson Lindseys | \$13.08 |
| Winchester Fashions Direct | \$21.22 |
| York Fashions Direct | \$15.14 |

This Year Sales by Fiscal Month

| Month | Sales |
|-------|--------|
| Jan | \$0.0M |
| Feb | \$0.0M |
| Mar | \$0.0M |
| Apr | \$0.0M |
| May | \$0.0M |
| Jun | \$0.0M |
| Jul | \$0.0M |
| Aug | \$0.0M |

New Stores

Info Overview District Monthly Sales New Stores

Fields Visualizations Filters

Page 4 of 4

New Page

Retail Analysis Sample PBIX - Power BI Desktop

Search

Sign in

File Home Insert Modeling View Help

Get data Refresh New visual New measure Publish

Visualizations Fields

Filters

Build visuals with your data

Select or drag fields from the Fields pane onto the report canvas.

Sales District Item Store Time

Values

Add data fields here

Drill through

Cross-report Off

Keep all filters On

Add drill-through fields here

Info Overview District Monthly Sales New Stores Page 1 +

Page 5 of 5

Open a visual in Focus Mode

Retail Analysis Sample PBIX - Power BI Desktop

File Home Insert Modeling View Help

Get data Refresh New visual New measure Sensitivity (preview) Publish

Store Sales Overview

This Year Sales by Chain



10 New Stores

104 Total Stores

Move your mouse over a visual and these buttons will appear.

Total Sales Variance by FiscalMonth and District Manager



DM

- Allan Guinot
- Andrew Ma
- Annelie Zubar
- Brad Sutton
- Carlos Grilo
- Chris Gray
- Chris McGurk
- Tina Lassila
- Valery Ushakov

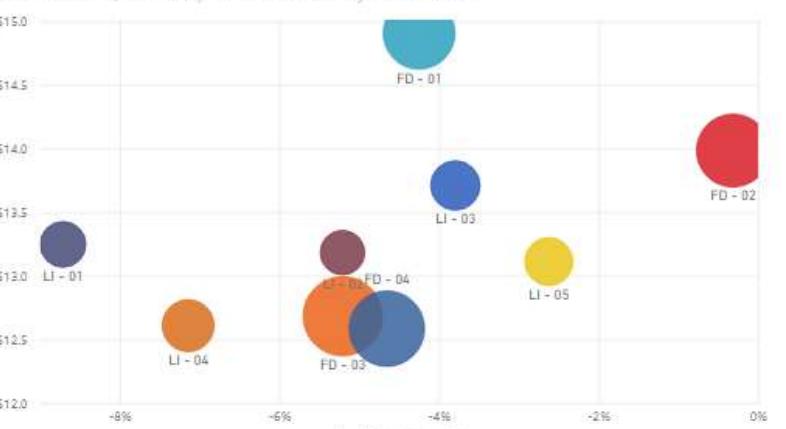
This Year Sales by PostalCode and Store Type

Store Type

- New Store
- Same Store



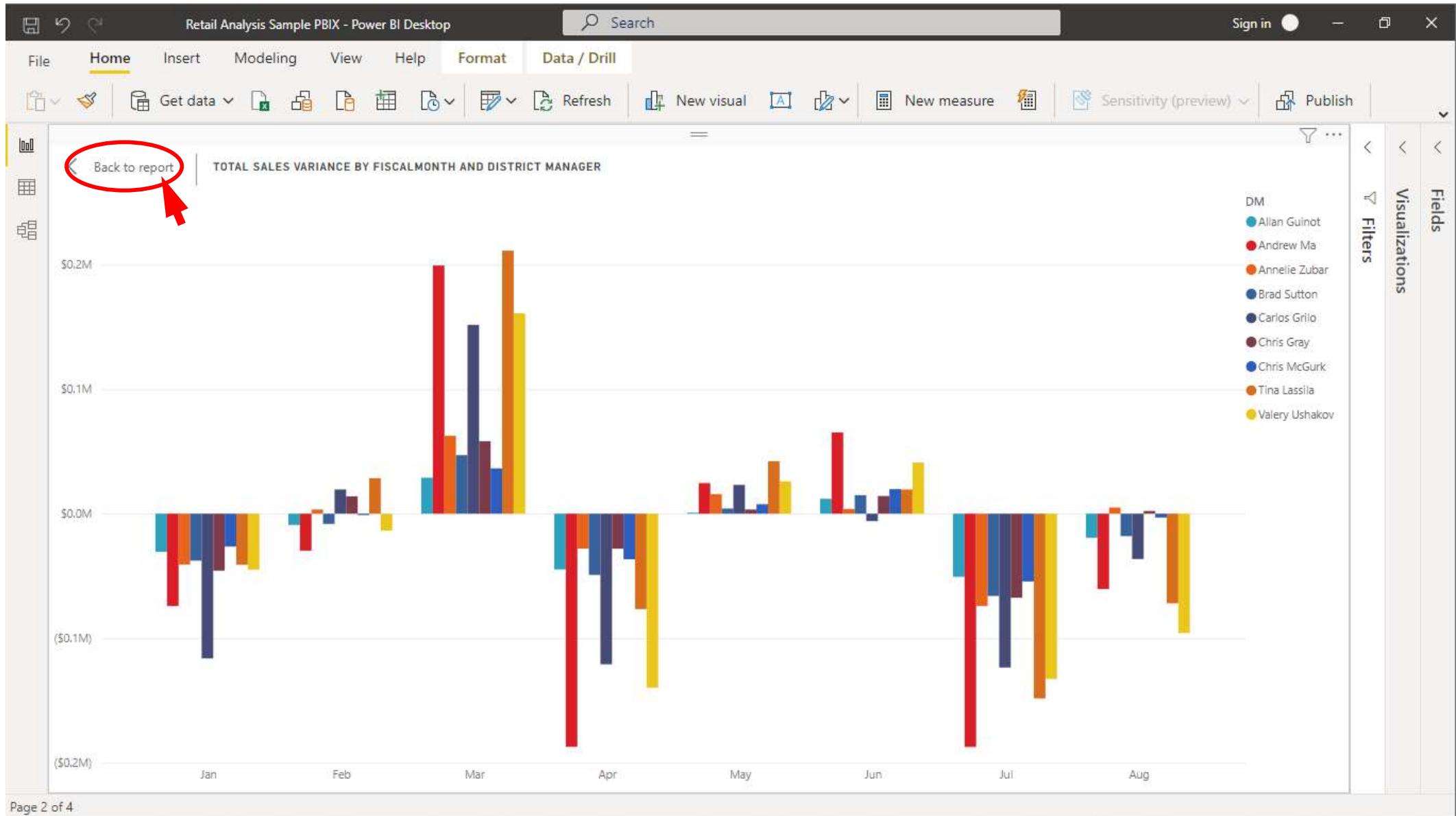
Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District



Info Overview District Monthly Sales New Stores +

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Back to report



Interactive Highlighting

Retail Analysis Sample PBIX - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Sensitivity (preview) Publish

Store Sales Overview

This Year Sales by Chain

Lindseys \$6M
Fashions Direct \$16M

Chain Lindseys This Year Sales \$6,393,844 (28.99%)

10 Stores
67 Total Stores

Total Sales Variance by FiscalMonth and District Manager

DM Allan Guinet, Andrew Ma, Annelie Zuber, Brad Sutton, Carlos Grilo, Chris Gray, Chris McGurk, Tina Lassila, Valery Ushakov

\$0.2M
\$0.0M
(\$0.2M)

Jan Feb Mar Apr May Jun Jul Aug

This Year Sales by PostalCode and Store Type

Store Type: New Store (Blue), Same Store (Red)

ILLINOIS INDIANA OHIO KENTUCKY TENNESSEE ALABAMA GEORGIA MISSISSIPPI

Map showing store locations across the central US.

Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District

LI - 01 LI - 02 LI - 03 LI - 04 LI - 05

\$13.8
\$13.6
\$13.4
\$13.2
\$13.0
\$12.8

-9% -8% -7% -6% -5% -4% -3% -2%

Total Sales Variance %

Overview District Monthly Sales New Stores

Page 2 of 4

The screenshot displays four interactive visualizations in Power BI Desktop:

- Store Sales Overview:** A pie chart titled "This Year Sales by Chain" showing the distribution of sales between "Lindseys" (\$6M) and "Fashions Direct" (\$16M). A callout box highlights the "Lindseys" segment with the text "Chain Lindseys This Year Sales \$6,393,844 (28.99%)".
- Total Sales Variance by FiscalMonth and District Manager:** A bar chart showing monthly sales variance from January to August. The Y-axis ranges from -\$0.2M to \$0.2M. The X-axis shows months from Jan to Aug. A legend lists district managers (DM) with corresponding color-coded bars: Allan Guinet (teal), Andrew Ma (red), Annelie Zuber (orange), Brad Sutton (blue), Carlos Grilo (dark blue), Chris Gray (dark red), Chris McGurk (light blue), Tina Lassila (orange), and Valery Ushakov (yellow).
- This Year Sales by PostalCode and Store Type:** A map of the central United States (Illinois, Indiana, Ohio, Kentucky, Tennessee, Alabama, Georgia, Mississippi) showing store locations. Red dots represent "Same Store" locations, and a single blue dot represents a "New Store". State abbreviations and major cities like Indianapolis, Columbus, Louisville, Memphis, and Atlanta are labeled.
- Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District:** A bubble chart with three axes: Sales Per Sq Ft (Y-axis, \$12.8 to \$13.8), Total Sales Variance % (X-axis, -9% to -2%), and This Year Sales (Bubble Size). Five bubbles are plotted for districts LI - 01 through LI - 05, each labeled with its corresponding district code.

The ribbon at the top includes tabs for File, Home, Insert, Modeling, View, Help, Format, Data / Drill, Get data, Refresh, New visual, New measure, Sensitivity (preview), Publish, and various icons for search, sign in, and window controls.

Interactive Highlighting

Retail Analysis Sample PBIX - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Sensitivity (preview) Publish

Store Sales Overview

This Year Sales by Chain

Lindseys \$6M
Fashions Direct \$16M

Chain Fashions Direct
This Year Sales \$15,658,108 (71.01%)

10 Total Stores

10 Total Stores

Total Sales Variance by FiscalMonth and District Manager

DM

- Allan Guinet
- Andrew Ma
- Annelie Zuber
- Brad Sutton
- Carlos Grilo
- Chris Gray
- Chris McGurk
- Tina Lassila
- Valery Ushakov

Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District

FD - 01 FD - 02 FD - 03 FD - 04

This Year Sales by PostalCode and Store Type

Store Type: New Store Same Store

Bing

Overview District Monthly Sales New Stores

Page 2 of 4

The screenshot shows a Power BI desktop interface with four main visualizations:

- Store Sales Overview:** A pie chart titled "This Year Sales by Chain" showing Lindsey's (\$6M) and Fashions Direct (\$16M). A red arrow points to the Fashions Direct slice.
- Total Sales Variance by FiscalMonth and District Manager:** A bar chart showing monthly variance for different district managers. The legend lists ten managers with corresponding colored bars.
- This Year Sales by PostalCode and Store Type:** A map of the Eastern United States showing store locations. Red dots represent "Same Store" locations, and blue dots represent "New Store" locations.
- Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District:** A bubble chart showing sales per square foot and total sales variance for four districts (FD - 01, FD - 02, FD - 03, FD - 04).

The interface includes a ribbon with Home selected, various navigation and data management buttons, and a sidebar on the right for Fields, Visualizations, and Filters.

Visuals

Visual: Pie Chart



Retail Analysis Sample PBIX - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Sensitivity (preview) Publish

Store Sales Overview

This Year Sales by Chain

Lindseys \$6M

Fashions Direct \$16M

Total Stores 104

New Stores 10

Total Sales Variance by Fiscal Month and District Manager

DM

- Allan Guinot
- Andrew Ma
- Annelie Zubar
- Brad Sutton
- Carlos Grilo
- Chris Gray
- Chris McGuire
- Tina Lassila
- Valery Ushakov

(-\$0.2M) \$0.0M \$0.2M

Jan Feb Mar Apr May Jun Jul Aug

This Year Sales by PostalCode and Store Type

Store Type: New Store Same Store

Map of the United States showing store locations by postal code.

Map Labels: SOUTH DAKOTA, WISCONSIN, IOWA, MICHIGAN, NEBRASKA, OREGON, ARKANSAS, TEXAS, LOUISIANA, MISSISSIPPI, ALABAMA, GEORGIA, FLORIDA, SOUTH CAROLINA, NORTH CAROLINA, MARYLAND, DELAWARE, NEW JERSEY, PENNSYLVANIA, NEW YORK, CONNECTICUT, RHODE ISLAND, MASSACHUSETTS, VERTMONT, NEW HAMPSHIRE, MAINE, NOVA SCOTIA, QUEBEC, ONTARIO, MONTREAL, TORONTO, BING.

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Visualizations

Filters

Legend

Details

Add data fields here

Values

This Year Sales

Tooltips

Add data fields here

Drill through

Cross-report

Off

Keep all filters

Select a visual in report canvas and the corresponding icon in visualizations pane will be highlighted

Page 2 of 4

Visual: Column Chart



Retail Analysis Sample PBIX - Power BI Desktop

Search

Sign in

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Sensitivity (preview) Publish

Store Sales Overview

This Year Sales by Chain

Lindseys \$6M

Fashions Direct \$16M

10 New Stores

104 Total Stores

Total Sales Variance by FiscalMonth and District Manager

DM

- Allan Guinot
- Andrew Ma
- Annelie Zuber
- Brad Sutton
- Carlos Grilo
- Chris Gray
- Chris McGurk
- Tina Lassila
- Valery Ushakov

Jan Feb Mar Apr May Jun Jul Aug

This Year Sales by PostalCode and Store Type

Store Type: New Store Same Store

UNITED STATES

SOUTH DAKOTA WISCONSIN MICHIGAN IOWA NEBRASKA KANSAS OREGON ARKANSAS TEXAS MISSISSIPPI LOUISIANA ALABAMA GEORGIA FLORIDA

Ottawa V.T. N.Y. MASS. R.J. NEW JERSEY N.H. KENNEBEC RIVER BING

Nova Scotia

Map showing store locations across the United States and Canada.

Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District

Sales Per Sq Ft

Total Sales Variance %

FD - 01

LI - 02

LI - 01

LI - 03

LI - 04

FD - 03

FD - 04

LI - 05

LI - 06

LI - 07

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Visual: Map



Retail Analysis Sample PBIX - Power BI Desktop

Search

Sign in

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Sensitivity (preview) Publish

Store Sales Overview

This Year Sales by Chain

Lindseys \$6M

Fashions Direct \$16M

10 New Stores

104 Total Stores

Total Sales Variance by FiscalMonth and District Manager

DM

- Allan Guinot
- Andrew Ma
- Annelie Zuber
- Brad Sutton
- Carlos Grilo
- Chris Gray
- Chris McGurk
- Tina Lassila
- Valery Ushakov

This Year Sales by PostalCode and Store Type

Store Type: New Store Same Store

UNITED STATES

SOUTH DAKOTA WISCONSIN MICHIGAN IOWA NEBRASKA KANSAS OREGON ARKANSAS MISSOURI TENNESSEE ALABAMA GEORGIA FLORIDA SOUTH CAROLINA NORTH CAROLINA MARYLAND DELAWARE NEW JERSEY NEW YORK CONNECTICUT MASSACHUSETTS RHODE ISLAND VERRMONT NEW HAMPSHIRE MAINE

Ottawa N.Y. N.H. R.J.

Bing

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Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District

PostalCode

Legend

Store Type

Latitude

Add data fields here

Longitude

Add data fields here

Size

This Year Sales

Tooltips

Add data fields here

Drill through

Info Overview District Monthly Sales New Stores +

Page 2 of 4

A red arrow points to the 'New Stores' card in the dashboard.

Visual: Scatter Chart



Retail Analysis Sample PBIX - Power BI Desktop

Search Sign in

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Publish Sensitivity (preview)

Store Sales Overview

This Year Sales by Chain

Lindseys \$6M

Fashions Direct \$16M

10 New Stores

104 Total Stores

This Year Sales by PostalCode and Store Type

Store Type: New Store (Blue), Same Store (Red)

UNITED STATES map showing store locations

Total Sales Variance by FiscalMonth and District Manager

DM Legend:

- Allan Guinot
- Andrew Ma
- Annelia Zuber
- Brad Sutton
- Carlos Grilo
- Chris Gray
- Chris McGurk
- Tina Lassila
- Valery Ushakov

Jan Feb Mar Apr May Jun Jul Aug

Total Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District

Legend: District (Color-coded bubbles)

X Axis: Total Sales Variance %

Y Axis: Sales Per Sq Ft

Size: This Year Sales

Play Axis: Add data fields here

Visualizations (Scatter Chart icon circled in red)

Filters

Details

District

StoreNumber

Legend

District

X Axis

Total Sales Variance %

Y Axis

Sales Per Sq Ft

Size

This Year Sales

Play Axis

Add data fields here

Info Overview District Monthly Sales New Stores +

Page 2 of 4

The screenshot shows a Power BI desktop interface with a dashboard titled "Store Sales Overview". The dashboard includes several visualizations: a pie chart for "This Year Sales by Chain" (Lindseys \$6M, Fashions Direct \$16M), a map of the United States showing store locations by postal code and type, a bar chart for "New Stores" (10), and a bar chart for "Total Stores" (104). A scatter chart titled "Total Sales Variance by FiscalMonth and District Manager" displays sales variance across months for different district managers. The "Visualizations" pane on the right shows a scatter chart icon circled in red. A red arrow points to one of the data labels in the scatter chart's data labels pane.

Visual: Slicer



Retail Analysis Sample PBIX - Power BI Desktop

Search Sign in

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Sensitivity (preview) Publish

District Manager

- Allan Guinot
- Andrew Ma
- Annelie Zubar
- Brad Sutton
- Carlos Grilo
- Chris Gray
- Chris McGurk
- Tina Lassila
- Valerie Ushakov

This Year Sales by StoreNumberName

Total Sales Variance % by FiscalMonth

Last Year Sales and This Year Sales by FiscalMonth

Category

Total Sales Variance %, Avg \$/Unit TY and This Year Sales by Category and Category

DM

Visualizations

Filters

Drill through

Cross-report

Off

Keep all filters

On

Add drill-through fields here

Info Overview District Monthly Sales New Stores +

Page 3 of 4

Visual: Area Chart



Retail Analysis Sample PBIX - Power BI Desktop

Search

Sign in

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Publish Sensitivity (preview)

District Manager

- Allan Guinot
- Andrew Ma
- Annelie Zubar
- Brad Sutton
- Carlos Grilo
- Chris Gray
- Chris McGurk
- Tina Lassila
- Valerie Ushakov

This Year Sales by StoreNumberName

Total Sales Variance % by FiscalMonth

Last Year Sales and This Year Sales by FiscalMonth

Last Year Sales This Year Sales

Total Sales Variance %, Avg \$/Unit TY and This Year Sales by Category and Category

Category

- 010-Womens
- 020-Mens
- 030-Kids
- 040-Juniors
- 050-Shoes
- 060-Intimate
- 070-Hosiery

obviEne lic ©

Info Overview District Monthly Sales New Stores +

Visualizations

Filters

Fields

FiscalMonth

Legend

Add data fields here

Values

Last Year Sales

This Year Sales

Secondary values

Add data fields here

Toolips

Add data fields here

Drill through

Cross-report

Visual: Clustered Column Chart



Retail Analysis Sample PBIX - Power BI Desktop

Search Sign in

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Publish Sensitivity (preview)

New Stores Analysis

This Year Sales by City and Chain

A world map with various cities labeled and colored according to their sales performance. Labels include NORTH AMERICA, EUROPE, ASIA, AFRICA, and AUSTRALIA. A legend at the bottom indicates colors for different chains.

Open Store Count by Open Month and Chain

A clustered bar chart showing the number of new stores opened each month. The x-axis lists months from Jan to Jul. The y-axis ranges from 0 to 2. Blue bars represent 'Fashions Direct' and red bars represent 'Lindseys'.

| Month | Fashions Direct | Lindseys |
|-------|-----------------|----------|
| Jan | 1 | 0 |
| Feb | 2 | 0 |
| Mar | 1 | 0 |
| Apr | 1 | 0 |
| May | 0 | 2 |
| Jun | 1 | 0 |
| Jul | 0 | 1 |

Sales Per Sq Ft by Name

A horizontal bar chart showing sales per square foot for various stores. The x-axis lists store names, and the y-axis shows sales values ranging from \$10.92 to \$21.22.

| Name | Sales (\$) |
|------------------------------|------------|
| Cincinnati 2 Fashions Direct | \$12.86 |
| Ft. Oglethorpe Lindseys | \$12.26 |
| Knoxville Lindseys | \$14.75 |
| Monroeville Fashions Direct | \$14.93 |
| Pasadena Lindseys | \$10.92 |
| Sharonville Fashions Direct | \$17.92 |
| Washington Fashions Direct | \$14.25 |
| Wilson Lindseys | \$13.08 |
| Winchester Fashions Direct | \$21.22 |
| York Fashions Direct | \$15.14 |

This Year Sales by FiscalMonth

A line chart showing district monthly sales over time. The x-axis shows months from Jan to Aug, and the y-axis shows sales in millions, ranging from \$0.0M to \$0.4M. The line shows a general upward trend with some fluctuations.

Info Overview District Monthly Sales New Stores +

Visualizations

Filters

Axis

Legend

Values

Tooltips

Add data fields here

Drill through

Cross-report

Off

Keep all filters

On

A red arrow points to the clustered bar chart in the main area, and a red circle highlights the clustered bar chart icon in the 'Visualizations' section of the ribbon.

Visual: Line Chart



Retail Analysis Sample PBIX - Power BI Desktop

Search

Sign in

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Publish Sensitivity (preview)

New Stores Analysis

This Year Sales by City and Chain

NORTH AMERICA, EUROPE, ASIA, AFRICA, SOUTH AMERICA, AUSTRALIA, Pacific Ocean, Atlantic Ocean, Indian Ocean.

Open Store Count by Open Month and Chain

| Month | Fashions Direct | Lindseys |
|-------|-----------------|----------|
| Jan | 1 | 0 |
| Feb | 0 | 1 |
| Mar | 1 | 0 |
| Apr | 0 | 1 |
| May | 0 | 2 |
| Jun | 1 | 0 |
| Jul | 0 | 1 |

Sales Per Sq Ft by Name

| Name | Sales Per Sq Ft |
|------------------------------|-----------------|
| Cincinnati 2 Fashions Direct | \$12.86 |
| Ft. Oglethorpe Lindseys | \$12.26 |
| Knoxville Lindseys | \$14.75 |
| Monroeville Fashions Direct | \$14.93 |
| Pasadena Lindseys | \$10.92 |
| Sharonville Fashions Direct | \$17.92 |
| Washington Fashions Direct | \$14.25 |
| Wilson Lindseys | \$13.08 |
| Winchester Fashions Direct | \$21.22 |
| York Fashions Direct | \$15.14 |

This Year Sales by FiscalMonth

| Fiscal Month | This Year Sales | Last Year Sales |
|--------------|-----------------|-----------------|
| Jan | \$0.0M | \$0.0M |
| Feb | \$0.0M | \$0.0M |
| Mar | \$0.0M | \$0.0M |
| Apr | \$0.0M | \$0.0M |
| May | \$0.0M | \$0.0M |
| Jun | \$0.0M | \$0.0M |
| Jul | \$0.0M | \$0.0M |
| Aug | \$0.0M | \$0.0M |

Info Overview District Monthly Sales New Stores

Visualizations

Filters

Fields

Axis

FiscalMonth

Legend

Add data fields here

Values

This Year Sales

Secondary values

Add data fields here

Toolips

Add data fields here

Drill through

Cross-report

A red arrow points to the "New Stores" tab in the ribbon at the bottom of the screen.

Fields

Visualizations and Fields

- Each visualization type requires different fields.

| Field Names | Used as |
|-------------------------------|--------------------|
| Axis, X Axis, Y Axis | Dimension |
| Value, Size | Measure |
| Legend, Group, Details | Category breakdown |
| Location, Latitude, Longitude | Geographic |
| Tooltips | Pop-up information |
| Play Axis | Animation |

Dimensions: qualitative values (such as names, dates, or geographical data) that give the context of collected data (measures).

Measures: numeric, quantitative values that you can measure. Measures can be aggregated by dimensions.

Pie Chart

Retail Analysis Sample PBIX - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Publish

Sensitivity (preview)

Visualizations Fields

Search

Sign in

Store Sales Overview

This Year Sales by Chain

Lindseys \$6M Fashions Direct \$16M

10 New Stores

37 Total Stores

Total Sales Variance by FiscalMonth and District Manager

DM Allan Guinot Andrew Ma Annette Zubar Brad Sutton Carlos Grillo Chris Gray Chris McGurk Tina Lessila Valery Ushakov

Jan Feb Mar Apr May Jun Jul Aug

This Year Sales by PostalCode and Store Type

Store Type New Store Same Store

Map showing store locations across the US, with red dots for New Stores and blue dots for Same Stores.

Total Sales Variance % Sales Per Sq Ft and This Year Sales by District and District

Sales Per Sq Ft

FD - 01 FD - 02 FD - 03 FD - 04

Total Sales Variance %

Used fields have a yellow tick symbol.

Keep all filters

Info Overview District Monthly Sales New Stores +

Column Chart

Retail Analysis Sample PBIX - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

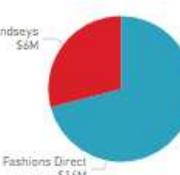
Get data Refresh New visual New measure Publish

Sensitivity (preview)

Sign in

Store Sales Overview

This Year Sales by Chain



10 New Stores

104 Total Stores

This Year Sales by PostalCode and Store Type



FiscalMonth

Legend

DM

Total Sales Variance

Axis

Drill through

Cross-report

Off

Keep all filters

On

Visualizations

Fields

Search

Total Sales ...

Total Sales ...

Total Units ...

Total Units ...

TotalSales

TotalSalesLY

District

BusinessUni...

District

DistrictID

DM

DM_Pic

DM_Pic_fl

Item

Store

Time

FiscalMonth

FiscalYear

Annotations:

- A red arrow points from the "FiscalMonth" filter in the Fields pane to the "FiscalMonth" axis of the top chart.
- A red arrow points from the "Total Sales Variance" filter in the Fields pane to the "Total Sales Variance %" axis of the bottom bubble chart.
- A red arrow points from the "District" filter in the Fields pane to the "District" dimension in the Visualizations pane.

Page 2 of 4

Map

Retail Analysis Sample PBIX - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Publish

Sensitivity (preview)

Sign in

Store Sales Overview

This Year Sales by Chain

10 New Stores

104 Total Stores

Total Sales Variance by Fiscal Month and District Manager

DM

- Allan Guinot
- Andrew Ma
- Annelie Zubar
- Brad Sutton
- Carlos Grin
- Chris Gray
- Chris McGurk
- Tina Lasila
- Valery Ushakov

This Year Sales by PostalCode and Store Type

Store Type

PostalCode

Legend

Store Type

Latitude

Longitude

Size

This Year Sales

Tooltips

Drill through

Visualizations

Fields

Search

Sales

District

Item

Store

Average Sel...

Chain

Count of O...

DistrictID

DM

DM_Pic

Name

New Stores

New Stores ...

Open Month

Open Mont...

Open Store...

Open Year

OpenDate

PostalCode

SellingArea...

Store Type

PostalCode

Latitude

Longitude

Size

This Year Sales

Tooltips

Add data fields here

Drill through

Info Overview District Monthly Sales New Stores +

Page 2 of 4

Scatter Chart

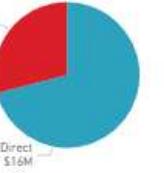
Retail Analysis Sample PBIX - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill Table tools

Name Store | Mark as date table | Manage relationships | New measure | Quick measure | New column | New table

Store Sales Overview

This Year Sales by Chain



10 New Stores

104 Total Stores

This Year Sales by PostalCode and Store Type



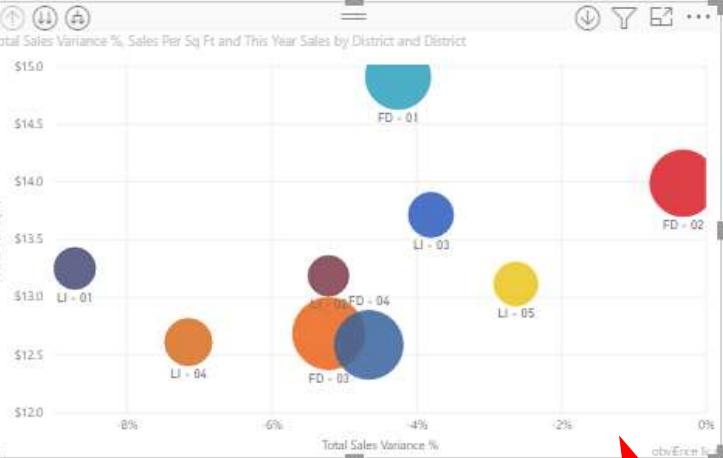
Total Sales Variance by FiscalMonth and District Manager



DM

- Allan Guinot
- Andrew Ma
- Annette Zubar
- Brad Sutton
- Carlos Grinn
- Chris Gray
- Chris McGurk
- Tina Lessila
- Valery Ushakov

This Year Sales Variance %, Sales Per Sq Ft and This Year Sales by District and District



District

StoreNumber

Legend

District

X Axis

Total Sales Variance %

V Axis

Sales Per Sq Ft

Size

This Year Sales

Play Axis

Add data fields here

Visualizations Fields

Search

Filters

Sales Per S...
Store Count
This Year Sales
Total Sales ...
District
DistrictID
BusinessUnit...
District
DistrictID
DM
DM_Pic
DM_Pic_fi
Item

Info Overview District Monthly Sales New Stores +

Page 2 of 4

Filter

Filters

Retail Analysis Sample PBIX - Power BI Desktop

File Home Insert Modeling View Help

Get data Refresh New visual New measure Publish

Sensitivity (preview)

Filters > <

Search

Visualizations

Store Sales Overview

This Year Sales by Chain

10 New Stores

37 Total Stores

This Year Sales by PostalCode and Store Type

Store Type: New Store (Blue), Same Store (Red)

Total Sales Variance by FiscalMonth and District Manager

DM: Andrew Ma, Carlos Grilo, Tina Lassila, Valery Ushakov

Total Sales Variance %: Sales Per Sq Ft and This Year Sales by District and District

District: FD - 01, FD - 02, FD - 03, FD - 04

Filters on this page

Chain: Fashions Direct (37) Lindsey (67)

Filter type: Basic filtering

Search

Select all

Require single selection

City: is (All)

District: is (All)

Name: is (All)

Info Overview District Monthly Sales New Stores +

Page 2 of 4

Data and Model Views

(Only in Power BI Desktop, not in Power BI Service)

Data View

Retail Analysis Sample PBIX - Power BI Desktop

File Home Help Table tools

Name Sales

Mark as date table Manage relationships New measure Quick measure New column New table

Data Table

| MonthID | ItemID | LocationID | Sum_GrossMarginAmount | Sum-Regular_Sales_Dollars | Sum_Markdown_Sales_Dollars | ScenarioID | ReportingPeriodID | Sum-Regular_Sales_Units | Sum |
|---------|--------|------------|-----------------------|---------------------------|----------------------------|------------|-------------------|-------------------------|-----|
| 201408 | 256441 | 568 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 289471 | 24 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 289471 | 27 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 292637 | 530 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 292637 | 565 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 277477 | 583 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 294718 | 40 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 310225 | 15 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 310226 | 531 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 310226 | 557 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 310228 | 526 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 300832 | 535 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 300832 | 558 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 312158 | 514 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 301760 | 28 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 313094 | 15 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 313094 | 41 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 313096 | 518 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 249519 | 4 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 305400 | 32 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 305414 | 18 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 317040 | 12 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 317040 | 18 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 317041 | 14 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 317047 | 34 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 318401 | 10 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |
| 201408 | 318401 | 13 | 4.99 | 9.99 | 0 | 1 | 20140801 | | 1 |

Table: Sales (923,371 rows)

Fields

Search

Sales

District

Item

Store

Time

Select table

Model View

Retail Analysis Sample PBIX - Power BI Desktop

File Home Help

Get data Refresh Manage relationships Publish

Properties Fields

District

- BusinessUnitID
- District
- DistrictID
- DM
- DM_Pic
- DM_Pic_fl
- DMImage

Store

- Chain
- City
- City Name
- DistrictID
- DistrictName
- DM
- DM_Pic
- LocationID
- Name
- Open Month
- Open Month No

Sales

- ItemID
- LocationID
- MonthID
- ReportingPeriodID
- ScenarioID
- Sum_GrossMarginAmou
- Sum_Markdown_Sales_D
- Sum_Markdown_Sales_U
- Sum-Regular_Sales_Dolla
- Sum-Regular_Sales_Unit
- Average Unit Price

Time

- FiscalMonth
- FiscalYear
- Month
- Period
- ReportingPeriodID

Item

- Buyer
- Category
- FamilyName
- ItemID
- Segment

Relationships between fields in different tables

The diagram illustrates the relationships between four tables in the Power BI Model View:

- District** (leftmost table): Contains fields like BusinessUnitID, District, DistrictID, DM, etc.
- Store**: Contains fields like Chain, City, City Name, DistrictID, DistrictName, DM, etc.
- Sales** (highlighted in yellow): Contains fields like ItemID, LocationID, MonthID, ReportingPeriodID, ScenarioID, Sum_GrossMarginAmou, Sum_Markdown_Sales_D, Sum_Markdown_Sales_U, Sum-Regular_Sales_Dolla, Sum-Regular_Sales_Unit, Average Unit Price.
- Time**: Contains fields like FiscalMonth, FiscalYear, Month, Period, ReportingPeriodID.
- Item**: Contains fields like Buyer, Category, FamilyName, ItemID, Segment.

Relationships are indicated by arrows between the tables:

- A relationship exists between District and Store, represented by a line connecting their primary keys.
- A relationship exists between Store and Sales, represented by a line connecting their primary keys.
- A relationship exists between Sales and Time, represented by a line connecting their primary keys.
- A relationship exists between Sales and Item, represented by a line connecting their primary keys.

Annotations in red highlight specific elements:

- A red circle highlights the "Relationships" icon in the ribbon.
- A red arrow points from the "Relationships" text to the line connecting the District and Store tables.
- A red arrow points from the "Relationships" text to the line connecting the Sales and Item tables.

Edit relationship

Retail Analysis Sample PBIX - Power BI Desktop

File Home Help

Get data Refresh Manage relationships Publish

Fields

Search

District

Item

Sales

Store

Time

Edit relationship

Select tables and columns that are related.

Store

| DM_Pic | DistrictID | Open Year | Store Type | Open Month No | Op |
|--|------------|-----------|------------|---------------|----|
| https://obvience-public.sharepoint.com/SiteAssets/ima... | 4 | 2010 | Same Store | 5 | M |
| https://obvience-public.sharepoint.com/SiteAssets/ima... | 2 | 2008 | Same Store | 2 | Fe |
| https://obvience-public.sharepoint.com/SiteAssets/ima... | 1 | 2006 | Same Store | 10 | Oc |

District

| DistrictID | District | DM | DM_Pic_fl | DM |
|------------|----------|----------------|--|----------------------------|
| 1 | FD - 01 | Valery Ushakov | http://farm6.staticflickr.com/5502/11550929204_d49a... | https://obvience-public.sh |
| 2 | FD - 02 | Tina Lassila | http://farm3.staticflickr.com/2811/11551022076_9260... | https://obvience-public.sh |
| 3 | FD - 03 | Carlos Grilo | http://farm4.staticflickr.com/3682/11550895504_4cfa... | https://obvience-public.sh |

Cardinality

Many to one (*:1)

Cross filter direction

Single

Make this relationship active

Apply security filter in both directions

Assume referential integrity

OK Cancel

All tables +

Update available (click to download)

double click

Manage relationships

Retail Analysis Sample PBIX - Power BI Desktop

File Home Help

Get data Refresh Manage relationships

1

Manage relationships

Active From: Table (Column) To: Table (Column)

| | | |
|-------------------------------------|---------------------------|--------------------------|
| <input checked="" type="checkbox"/> | Sales (ItemID) | Item (ItemID) |
| <input checked="" type="checkbox"/> | Sales (LocationID) | Store (LocationID) |
| <input checked="" type="checkbox"/> | Sales (ReportingPeriodID) | Time (ReportingPeriodID) |
| <input checked="" type="checkbox"/> | Store (DistrictID) | District (DistrictID) |

Properties Fields

Search

District BusinessUnitID District DistrictID DM DM_Pic DM_Pic_fi DMImage

Create relationship

Select tables and columns that are related.

District

| DistrictID | District | DM | DM_Pic_fi | DM |
|------------|----------|----------------|--|-------------------------------|
| 1 | FD - 01 | Valery Ushakov | http://farm6.staticflickr.com/5502/11550929204_d49a... | https://obvience-public.sh... |
| 2 | FD - 02 | Tina Lassila | http://farm3.staticflickr.com/2811/11551022076_9260... | https://obvience-public.sh... |
| 3 | FD - 03 | Carlos Grilo | http://farm4.staticflickr.com/3682/11550895504_4cfa... | https://obvience-public.sh... |

New... Autodetect...

2

3

4

5

6

All tables +

Cardinality Cross filter direction

available (click to download)

Learning by Doing

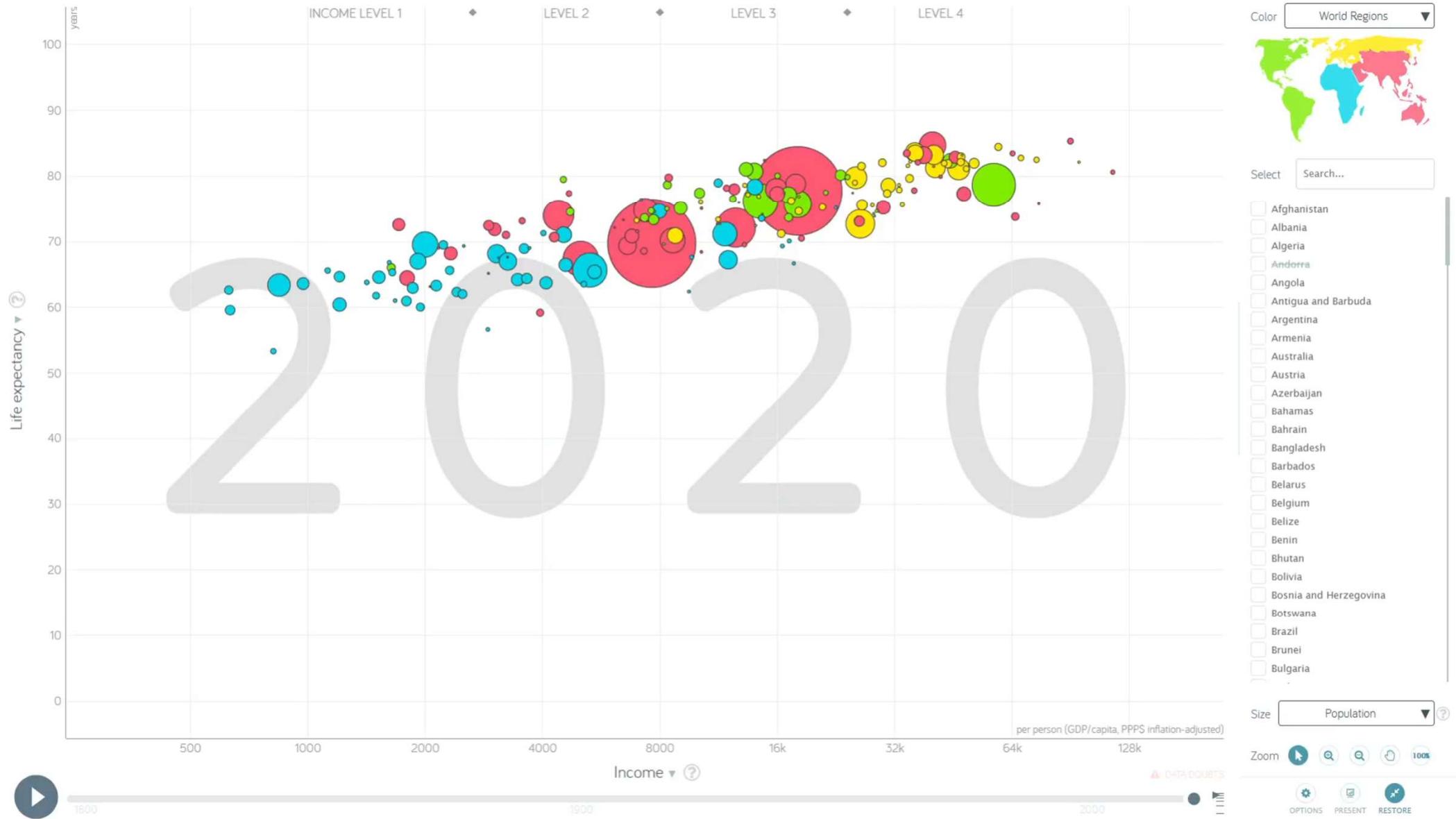
Example: Income vs Life Expectancy

For Power BI Desktop

For Power BI Service [click here](#)

Gap Minder

<https://www.gapminder.org/tools/>



Get Data: Excel File

The screenshot shows the Power BI Desktop interface with the title bar "Untitled - Power BI Desktop". The ribbon menu is visible with "Home" selected. The main area displays the message "Add data to your report" and "Once loaded, your data will appear in the Fields pane." Below this, there are four buttons: "Import data from Excel" (highlighted with a red circle and a red arrow pointing to it), "Import data from SQL Server", "Paste data into a blank table", and "Try a sample dataset". A "Get data from another source →" link is also present. To the right, the "Visualizations" pane shows various chart icons, and the "Fields" pane shows filter settings. The bottom navigation bar includes "Page 1" and a plus sign icon.

Untitled - Power BI Desktop

File Home Insert Modeling View Help

Get data Refresh New visual New measure Publish

Add data to your report

Once loaded, your data will appear in the **Fields** pane.

Import data from Excel Import data from SQL Server Paste data into a blank table Try a sample dataset

Get data from another source →

Visualizations Fields

Filters

Values

Add data fields here

Drill through

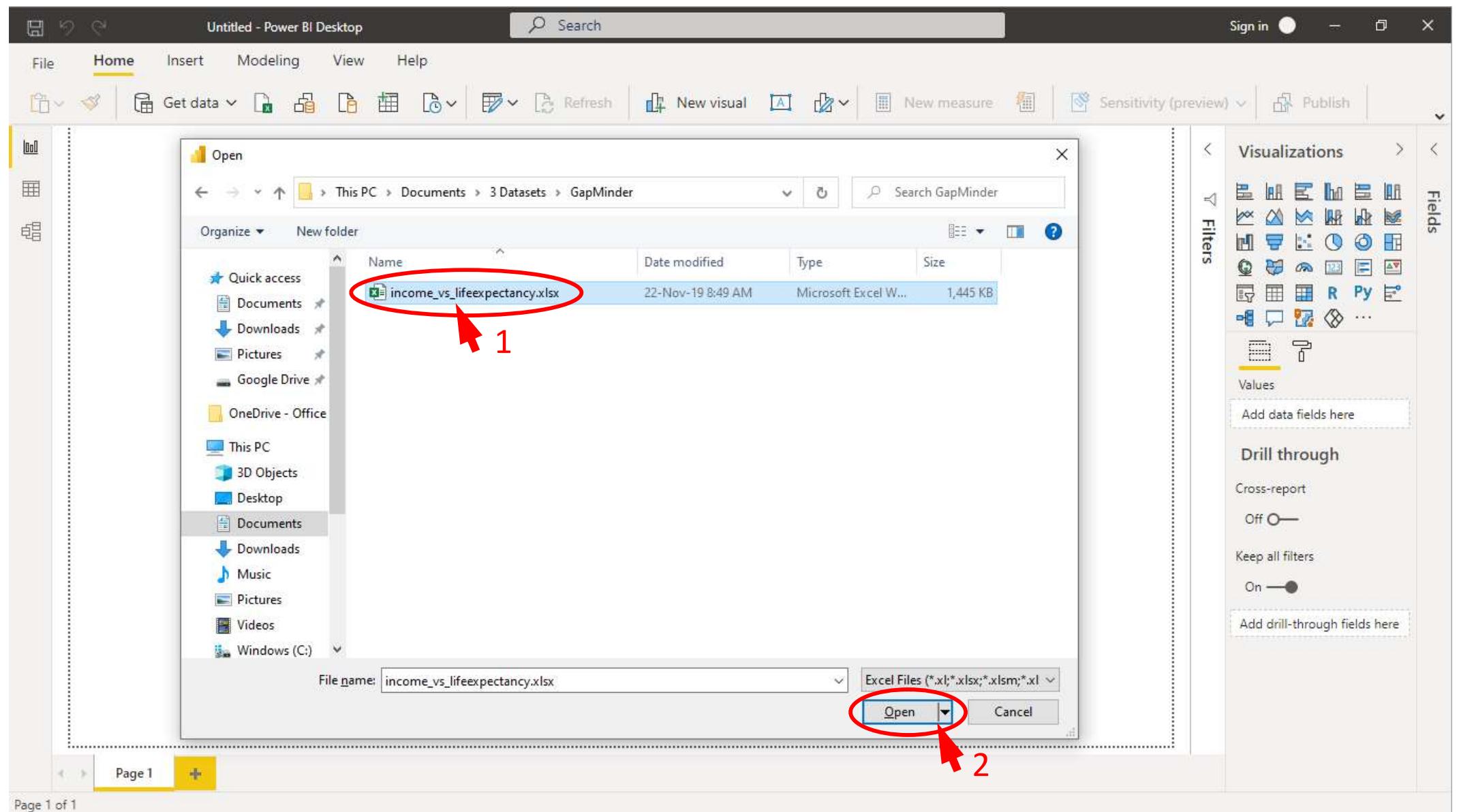
Cross-report Off

Keep all filters On

Add drill-through fields here

Page 1 +

Page 1 of 1



Get Data: income_vs_lifeexpectancy.xlsx

Income and Life Expectancy - Power BI Desktop

File Home View Modeling Help

Cut Copy Format Painter Paste Get Data Sources Enter Data Edit Queries Refresh New Page New Visual Ask A Question Buttons Text box From Marketplace From File Switch Theme Manage Relationships New Measure New Column New Quick Measure Publish Clipboard Most Common Insert Custom visuals Themes Relationships Calculations Share Veera Muangsin

Excel Power BI datasets Power BI dataflows SQL Server Analysis Services Text/CSV Web OData feed Blank Query More...

Open dialog showing file path: << GDBI > gapminder / income_vs_lifeexpectancy.xlsx

Visualizations Fields

Filters

Values Add data fields here

Drillthrough

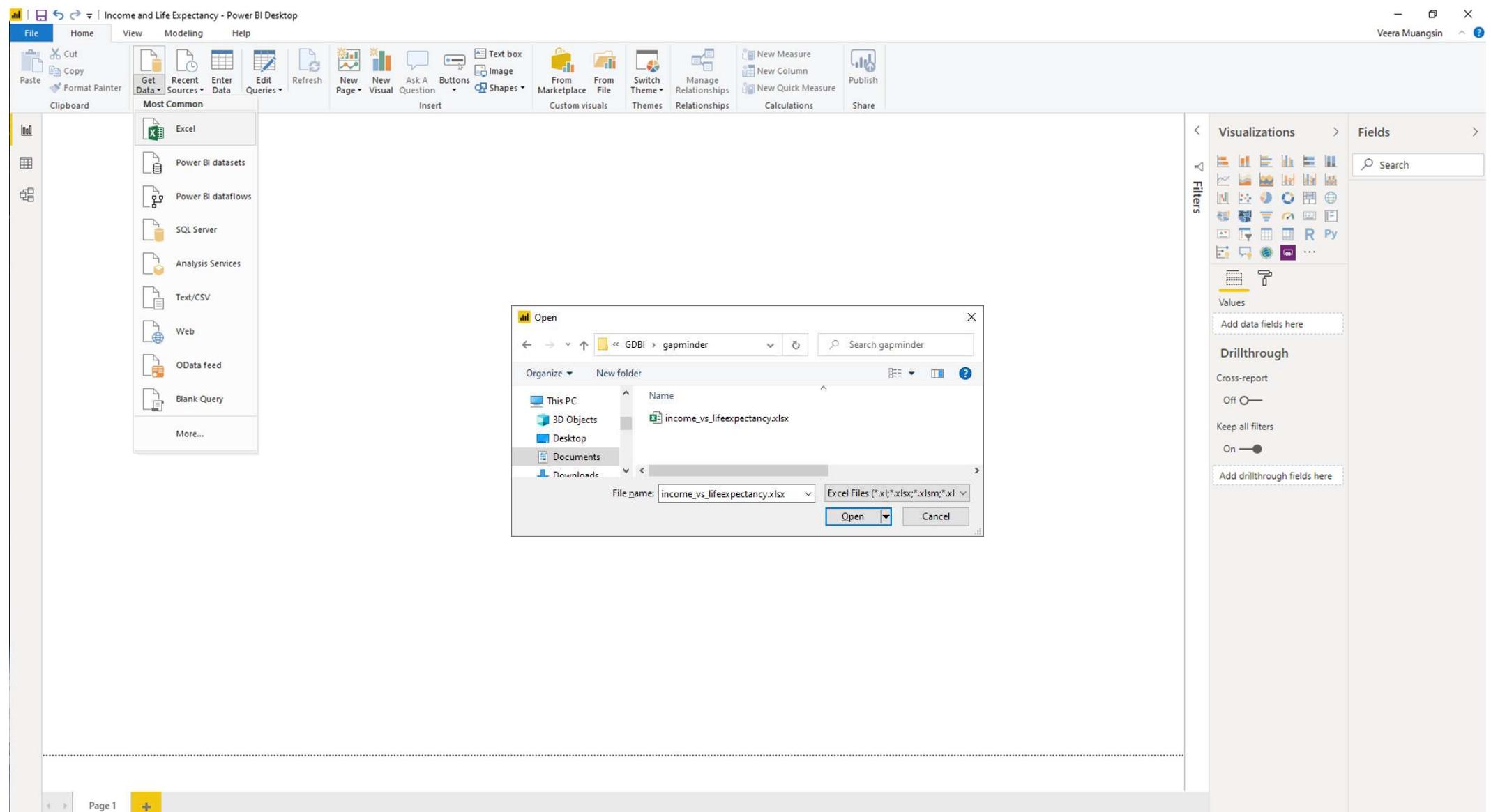
Cross-report Off

Keep all filters On

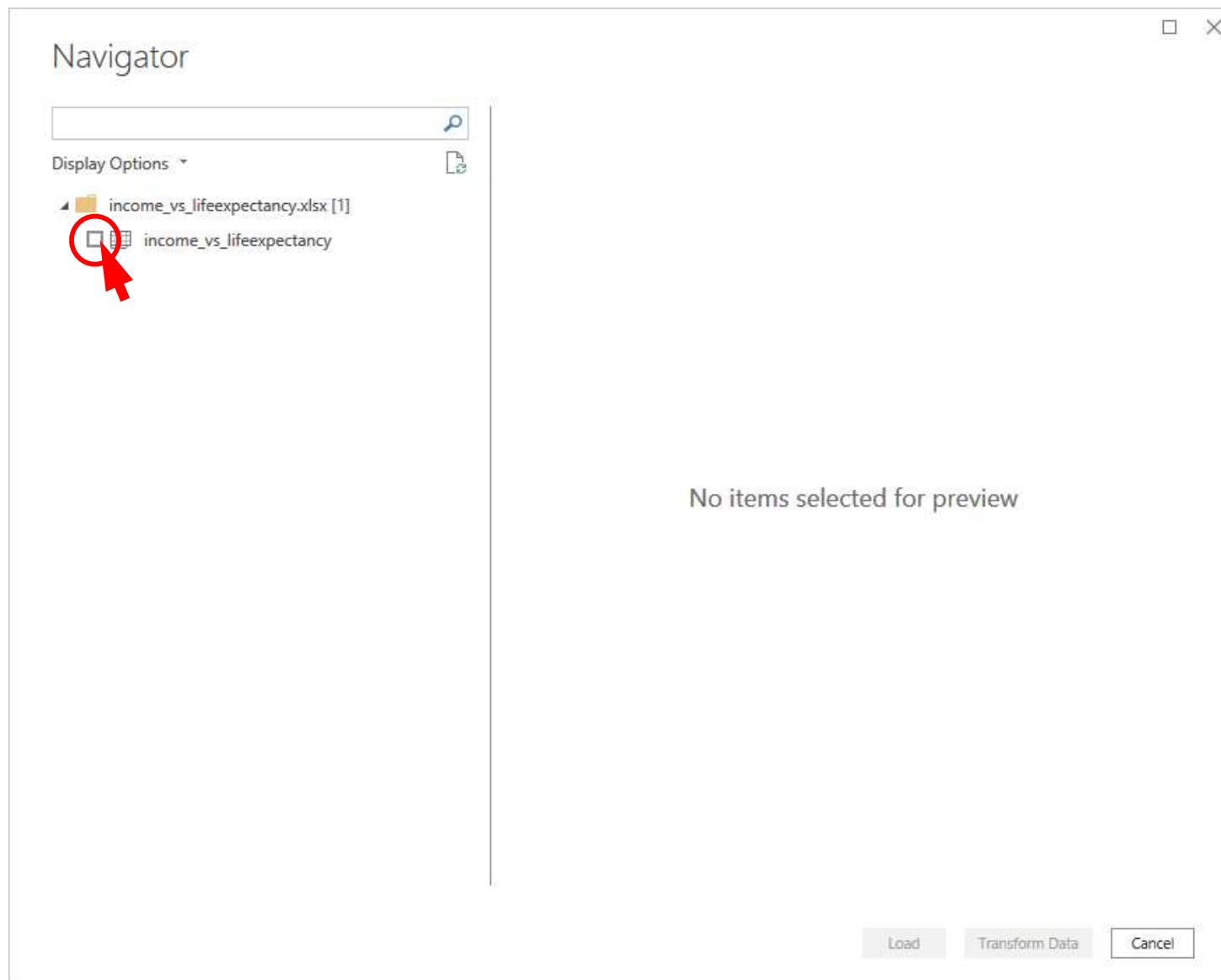
Add drillthrough fields here

Page 1 +

PAGE 1 OF 1



Select Excel Sheet



Transform Data

Navigator

Display Options

- income_vs_lifeexpectancy.xlsx [1]
- income_vs_lifeexpectancy

| year | country | region | income per person |
|------|------------------------|--------------------|-------------------|
| 1800 | Afghanistan | asia_west | 60 |
| 1800 | Albania | europe_east | 66 |
| 1800 | Algeria | africa_north | 71 |
| 1800 | Angola | africa_sub_saharan | 61 |
| 1800 | Antigua and Barbuda | america_north | 75 |
| 1800 | Argentina | america_south | 151 |
| 1800 | Armenia | europe_east | 51 |
| 1800 | Australia | east_asia_pacific | 81 |
| 1800 | Austria | europe_west | 185 |
| 1800 | Azerbaijan | europe_east | 77 |
| 1800 | Bahamas | america_north | 145 |
| 1800 | Bahrain | asia_west | 124 |
| 1800 | Bangladesh | asia_west | 87 |
| 1800 | Barbados | america_north | 91 |
| 1800 | Belarus | europe_east | 60 |
| 1800 | Belgium | europe_west | 241 |
| 1800 | Belize | america_north | 57 |
| 1800 | Benin | africa_sub_saharan | 59 |
| 1800 | Bhutan | asia_west | 62 |
| 1800 | Bolivia | america_south | 85 |
| 1800 | Bosnia and Herzegovina | europe_east | 66 |
| 1800 | Botswana | africa_sub_saharan | 39 |
| 1800 | Brazil | america_south | 111 |

Load Transform Data Cancel



Power Query Editor: check type

Screenshot of the Power Query Editor interface showing a query named "income_vs_lifeexpectancy". The "Transform" tab is selected in the ribbon.

The main area displays a table with 27 rows of data. The columns are:

- year (highlighted with a red box)
- country
- region
- income per person
- life expectancy
- population

The "Properties" pane on the right shows the query name is "income_vs_lifeexpectancy". The "Applied Steps" pane shows the last step was "Changed Type".

| | year | country | region | income per person | life expectancy | population |
|----|------|------------------------|--------------------|-------------------|-----------------|------------|
| 1 | 1800 | Afghanistan | asia_west | 603 | 28.2 | 3280000 |
| 2 | 1800 | Albania | europe_east | 667 | 35.4 | 410000 |
| 3 | 1800 | Algeria | africa_north | 715 | 28.8 | 2500000 |
| 4 | 1800 | Angola | africa_sub_saharan | 618 | 27 | 1570000 |
| 5 | 1800 | Antigua and Barbuda | america_north | 757 | 33.5 | 37000 |
| 6 | 1800 | Argentina | america_south | 1510 | 33.2 | 534000 |
| 7 | 1800 | Armenia | europe_east | 514 | 34 | 413000 |
| 8 | 1800 | Australia | east_asia_pacific | 814 | 34 | 351000 |
| 9 | 1800 | Austria | europe_west | 1850 | 34.4 | 3210000 |
| 10 | 1800 | Azerbaijan | europe_east | 775 | 29.2 | 880000 |
| 11 | 1800 | Bahamas | america_north | 1450 | 35.2 | 27400 |
| 12 | 1800 | Bahrain | asia_west | 1240 | 30.3 | 64500 |
| 13 | 1800 | Bangladesh | asia_west | 876 | 25.5 | 19200000 |
| 14 | 1800 | Barbados | america_north | 913 | 32.1 | 81700 |
| 15 | 1800 | Belarus | europe_east | 608 | 36.2 | 2360000 |
| 16 | 1800 | Belgium | europe_west | 2410 | 40 | 3140000 |
| 17 | 1800 | Belize | america_north | 579 | 26.5 | 25500 |
| 18 | 1800 | Benin | africa_sub_saharan | 597 | 31 | 637000 |
| 19 | 1800 | Bhutan | asia_west | 629 | 28.8 | 90000 |
| 20 | 1800 | Bolivia | america_south | 854 | 33 | 1100000 |
| 21 | 1800 | Bosnia and Herzegovina | europe_east | 669 | 35.1 | 852000 |
| 22 | 1800 | Botswana | africa_sub_saharan | 397 | 33.6 | 121000 |
| 23 | 1800 | Brazil | america_south | 1110 | 32 | 3640000 |
| 24 | 1800 | Brunei | east_asia_pacific | 1510 | 29.2 | 2130 |
| 25 | 1800 | Bulgaria | europe_east | 1090 | 35.8 | 1990000 |
| 26 | 1800 | Burkina Faso | africa_sub_saharan | 480 | 29.2 | 1670000 |
| 27 | 1800 | Burundi | africa_sub_saharan | 418 | 31.5 | 899000 |

6 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows PREVIEW DOWNLOADED AT 1:42 PM

Change data type if incorrect

In this example, every column has a correct type.

The screenshot shows the Power Query Editor interface with a data preview window. The columns visible are 'year', 'country', 'region', 'income per person', 'life expectancy', and 'population'. The 'region' column header is selected, and a context menu is open over it, listing various data types: Decimal Number, Fixed decimal number, Whole Number, Percentage, Date/Time, Date, Time, Date/Time/Timezone, Duration, Text, True/False, Binary, and Using Locale... A red circle highlights the 'Text' option in the menu. To the right of the preview window, the 'Query Settings' pane is open, showing the query name 'income_vs_lifeexpectancy' and a list of applied steps, including 'Changed Type'.

| year | country | region | income per person | life expectancy | population |
|------|------------------------|--------------------|-------------------|-----------------|------------|
| 1800 | Afghanistan | | 603 | 28.2 | 3280000 |
| 1800 | Albania | | 667 | 35.4 | 410000 |
| 1800 | Algeria | | 715 | 28.8 | 2500000 |
| 1800 | Angola | | 618 | 27 | 1570000 |
| 1800 | Antigua and Barbuda | | 757 | 33.5 | 37000 |
| 1800 | Argentina | | 1510 | 33.2 | 534000 |
| 1800 | Armenia | | 514 | 34 | 413000 |
| 1800 | Australia | | 814 | 34 | 351000 |
| 1800 | Austria | | 1850 | 34.4 | 3210000 |
| 1800 | Azerbaijan | | 775 | 29.2 | 880000 |
| 1800 | Bahamas | | 1450 | 35.2 | 27400 |
| 1800 | Bahrain | | 1240 | 30.3 | 64500 |
| 1800 | Bangladesh | | 876 | 25.5 | 19200000 |
| 1800 | Barbados | | 913 | 32.1 | 81700 |
| 1800 | Belarus | | 608 | 36.2 | 2360000 |
| 1800 | Belgium | europe_west | 2410 | 40 | 3140000 |
| 1800 | Belize | america_north | 579 | 26.5 | 25500 |
| 1800 | Benin | africa_sub_saharan | 597 | 31 | 637000 |
| 1800 | Bhutan | asia_west | 629 | 28.8 | 90000 |
| 1800 | Bolivia | america_south | 854 | 33 | 1100000 |
| 1800 | Bosnia and Herzegovina | europe_east | 669 | 35.1 | 852000 |
| 1800 | Botswana | africa_sub_saharan | 397 | 33.6 | 121000 |
| 1800 | Brazil | america_south | 1110 | 32 | 3640000 |
| 1800 | Brunei | east_asia_pacific | 1510 | 29.2 | 2130 |
| 1800 | Bulgaria | europe_east | 1090 | 35.8 | 1990000 |
| 1800 | Burkina Faso | africa_sub_saharan | 480 | 29.2 | 1670000 |
| 1800 | Burundi | africa_sub_saharan | 418 | 31.5 | 899000 |

Close & Apply Changes

Screenshot of the Power Query Editor showing a query named "income_vs_lifeexpectancy". The "Close & Apply" button in the ribbon is circled in red and has a red arrow pointing to it.

The "APPLIED STEPS" pane shows the following changes:

- Source
- Navigation
- Promoted Headers
- Changed Type

| year | country | region | income per person | life expectancy | population |
|------|------------------------|--------------------|-------------------|-----------------|------------|
| 1800 | Afghanistan | asia_west | 603 | 28.2 | 3280000 |
| 1800 | Albania | europe_east | 667 | 35.4 | 410000 |
| 1800 | Algeria | africa_north | 715 | 28.8 | 2500000 |
| 1800 | Angola | africa_sub_saharan | 618 | 27 | 1570000 |
| 1800 | Antigua and Barbuda | america_north | 757 | 33.5 | 37000 |
| 1800 | Argentina | america_south | 1510 | 33.2 | 534000 |
| 1800 | Armenia | europe_east | 514 | 34 | 413000 |
| 1800 | Australia | east_asia_pacific | 814 | 34 | 351000 |
| 1800 | Austria | europe_west | 1850 | 34.4 | 3210000 |
| 1800 | Azerbaijan | europe_east | 775 | 29.2 | 880000 |
| 1800 | Bahamas | america_north | 1450 | 35.2 | 27400 |
| 1800 | Bahrain | asia_west | 1240 | 30.3 | 64500 |
| 1800 | Bangladesh | asia_west | 876 | 25.5 | 19200000 |
| 1800 | Barbados | america_north | 913 | 32.1 | 81700 |
| 1800 | Belarus | europe_east | 608 | 36.2 | 2360000 |
| 1800 | Belgium | europe_west | 2410 | 40 | 3140000 |
| 1800 | Belize | america_north | 579 | 26.5 | 25500 |
| 1800 | Benin | africa_sub_saharan | 597 | 31 | 637000 |
| 1800 | Bhutan | asia_west | 629 | 28.8 | 90000 |
| 1800 | Bolivia | america_south | 854 | 33 | 1100000 |
| 1800 | Bosnia and Herzegovina | europe_east | 669 | 35.1 | 852000 |
| 1800 | Botswana | africa_sub_saharan | 397 | 33.6 | 121000 |
| 1800 | Brazil | america_south | 1110 | 32 | 3640000 |
| 1800 | Brunei | east_asia_pacific | 1510 | 29.2 | 2130 |
| 1800 | Bulgaria | europe_east | 1090 | 35.8 | 1990000 |
| 1800 | Burkina Faso | africa_sub_saharan | 480 | 29.2 | 1670000 |
| 1800 | Burundi | africa_sub_saharan | 418 | 31.5 | 899000 |

6 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows PREVIEW DOWNLOADED AT 1:42 PM

Data is ready.

Untitled - Power BI Desktop

File Home Insert Modeling View Help

Get data Refresh New visual New measure Publish

Visualizations Fields

Filters

Build visuals with your data

Select or drag fields from the Fields pane onto the report canvas.

income_vs_lifeex...

- country
- Σ income per ...
- Σ life expecta...
- Σ population
- region
- Σ year

Values

Add data fields here

Drill through

Cross-report

Off

Keep all filters

On

Add drill-through fields here

Page 1 +

Page 1 of 1

The screenshot shows the Power BI Desktop interface. The main area is titled 'Build visuals with your data' with the instruction 'Select or drag fields from the Fields pane onto the report canvas.' Below this is a small icon illustrating a field being dragged. To the right is the 'Fields' pane, which contains a search bar and a list of fields under 'income_vs_lifeex...'. This list includes 'country', ' Σ income per ...', ' Σ life expecta...', ' Σ population', 'region', and ' Σ year'. A red box highlights this entire section. The 'Values' section below it has a placeholder 'Add data fields here'. Further down are sections for 'Drill through', 'Cross-report' (set to 'Off'), 'Keep all filters' (set to 'On'), and another placeholder 'Add drill-through fields here'. The top navigation bar shows tabs for File, Home (which is selected), Insert, Modeling, View, and Help. The ribbon below the tabs includes icons for Get data, Refresh, New visual, New measure, and Publish. The status bar at the bottom shows 'Page 1 of 1'.

Create a Scatter Chart

The screenshot shows the Power BI Desktop interface with the title bar "income_vs_lifeexpectancy - Power BI Desktop". The ribbon menu is visible with "Home" selected. On the left, there's a preview area showing a scatter plot with several data points. A red circle labeled "2" points to the "..." button at the bottom right of this preview area. To the right of the preview is a "Visualizations" pane containing a "Scatter chart" icon, which is also circled in red and has a red arrow pointing to it from the number "1". The "Visualizations" pane also includes sections for "Filters", "Fields", and various chart and table options. The "Fields" pane on the far right lists fields like "country", "income per ...", "life expecta...", "population", "region", and "year". At the bottom, there are navigation buttons for "Page 1" and a plus sign, with the status bar showing "Page 1 of 1".

Assign fields to X and Y Axes

The screenshot shows the Power BI Desktop interface with the title bar "income_vs_lifeexpectancy - Power BI Desktop". The ribbon menu is visible with "Home" selected. On the left, there's a visualization area with a bubble chart and a message "Select or drag fields to populate this visual". To the right is the "Fields" pane, which lists fields from the data source "income_vs_lifeexpectancy": country, Σ income per person, Σ life expectancy, Σ population, region, and year. The "X Axis" and "Y Axis" sections in the Fields pane are highlighted with red arrows pointing to them, with the text "Drag & Drop" overlaid. A red arrow also points from the "Size" section to the "Fields" pane.

income_vs_lifeexpectancy

- country
- Σ income per person
- Σ life expectancy
- Σ population
- region
- year

Drag & Drop

X Axis

Y Axis

Size

Play Axis

Toolips

Assign fields to X and Y Axes

The screenshot shows the Power BI Desktop interface with a scatter plot titled "INCOME PER PERSON AND LIFE EXPECTANCY". The plot displays a single data point at approximately (income per person: 0.1bn, life expectancy: 2M). The Y-axis is labeled "life expectancy" and the X-axis is labeled "income per person". Both axes have red circles around their respective labels.

The Power BI ribbon is visible at the top, showing the "Home" tab is selected. The "Fields" pane on the right lists fields from the data source "income_vs_lifeexpectancy": country, income per person (selected), life expectancy (selected), population, region, and year.

Visualizations pane:

- Details: Add data fields here
- Legend: Add data fields here
- X Axis: income per person
- Y Axis: life expectancy
- Size: Add data fields here
- Play Axis: Add data fields here
- Toolips: Add data fields here

Filters pane:

- Back to report
- INCOME PER PERSON AND LIFE EXPECTANCY

Page 1 of 1

Change calculation of income

The screenshot shows the Power BI Desktop interface with a scatter plot titled "INCOME PER PERSON AND LIFE EXPECTANCY". The Y-axis is labeled "life expectancy" and ranges from 0.1bn to 2M. The X-axis is labeled "income per person" and has values 0.2bn and 0.1bn. A single data point is visible at approximately (0.2bn, 1.5M). On the right side, a context menu is open over the "income per person" field in the "Fields" section. The menu options include:

- Remove field
- Rename for this visual
- Move to
- Don't summarize
- Sum (selected)
- Average (highlighted with red arrow 1)
- Minimum
- Maximum
- Count (Distinct)
- Count
- Standard deviation
- Variance
- Median
- Show value as
- New quick measure

Red arrows labeled 1 and 2 indicate the path from the "Sum" option to the "Average" option in the menu.

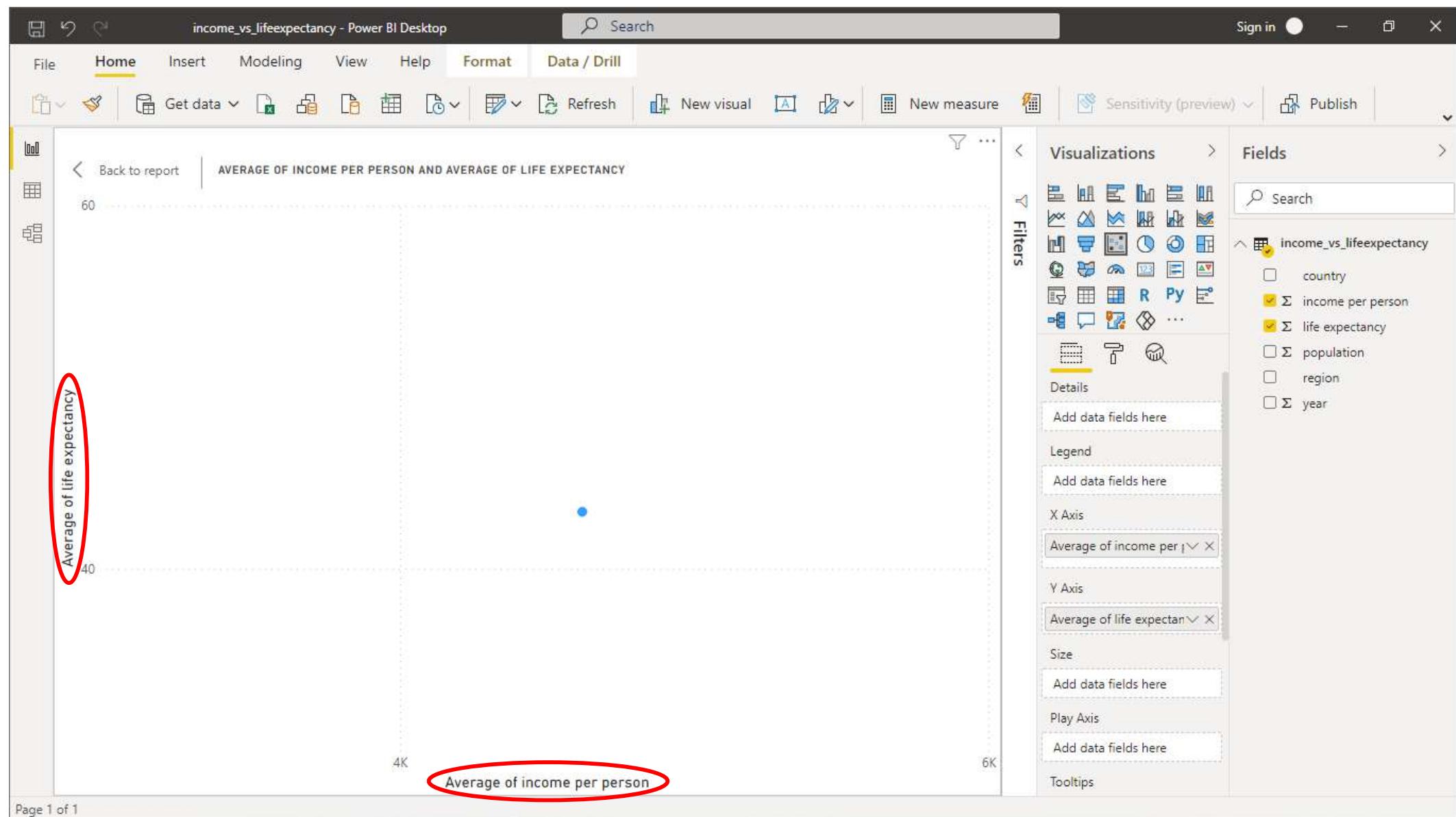
Change calculation of life expectancy

The screenshot shows the Power BI Desktop interface with a scatter plot titled "AVERAGE OF INCOME PER PERSON AND LIFE EXPECTANCY". The X-axis is labeled "Average of income per person" and ranges from 0K to 6K. The Y-axis is labeled "life expectancy" and ranges from 1M to 2M. A single data point is visible at approximately (4K, 1.5M).

A context menu is open over the Y-axis, specifically over the "life expectancy" field. The menu is divided into sections: "Visualizations", "Fields", and "Filters". The "Fields" section is expanded, showing various aggregation options:

- Remove field
- Rename for this visual
- Move to
- Don't summarize
- Sum
- Average** (highlighted with a red arrow labeled "2")
- Minimum
- Maximum
- Count (Distinct)
- Count
- Standard deviation
- Variance
- Median
- Show value as
- New quick measure

Red arrows labeled "1" point to the "life expectancy" field in the Y-axis dropdown and the "Y Axis" section of the context menu.

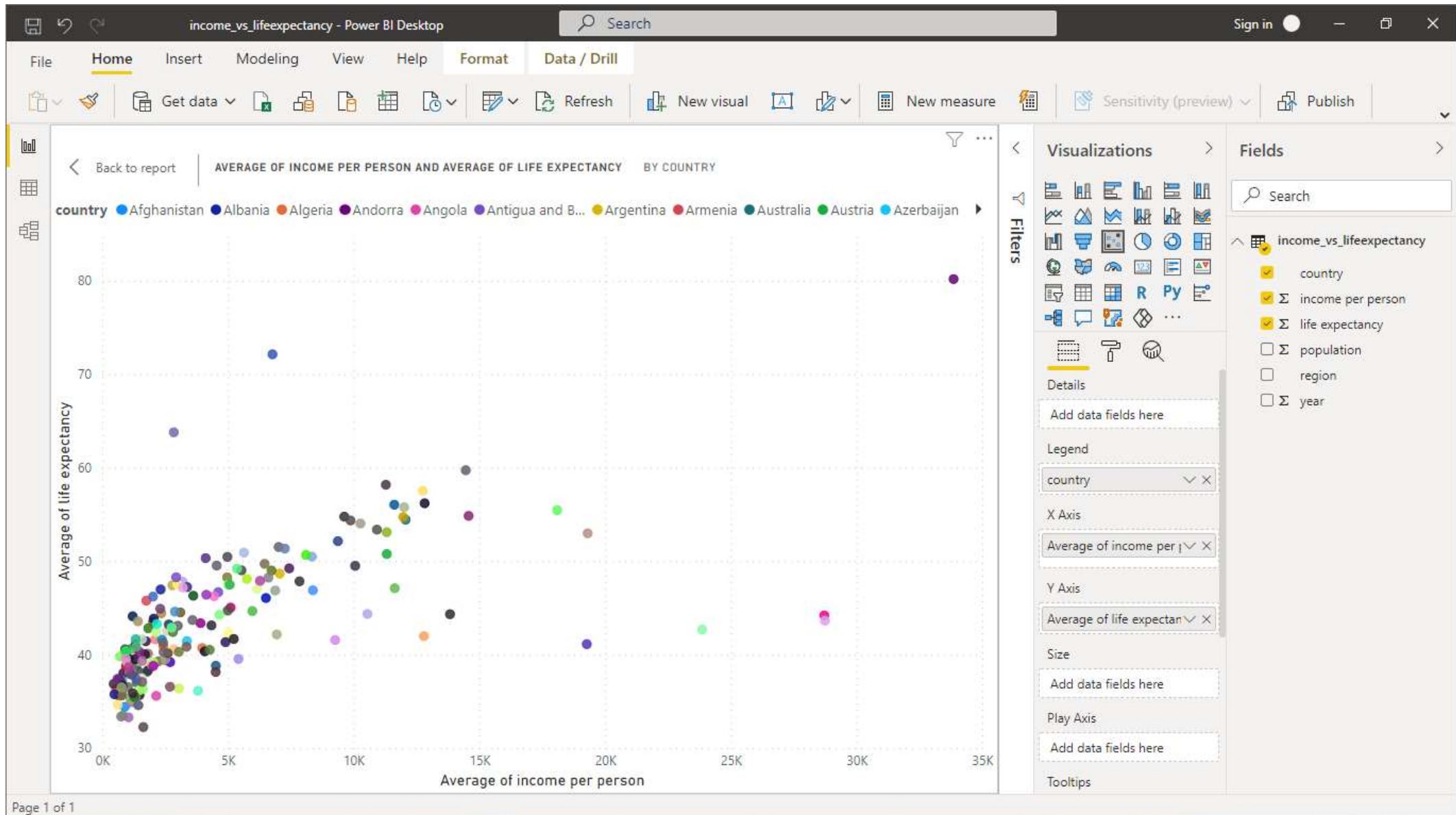


Use Country as Legend

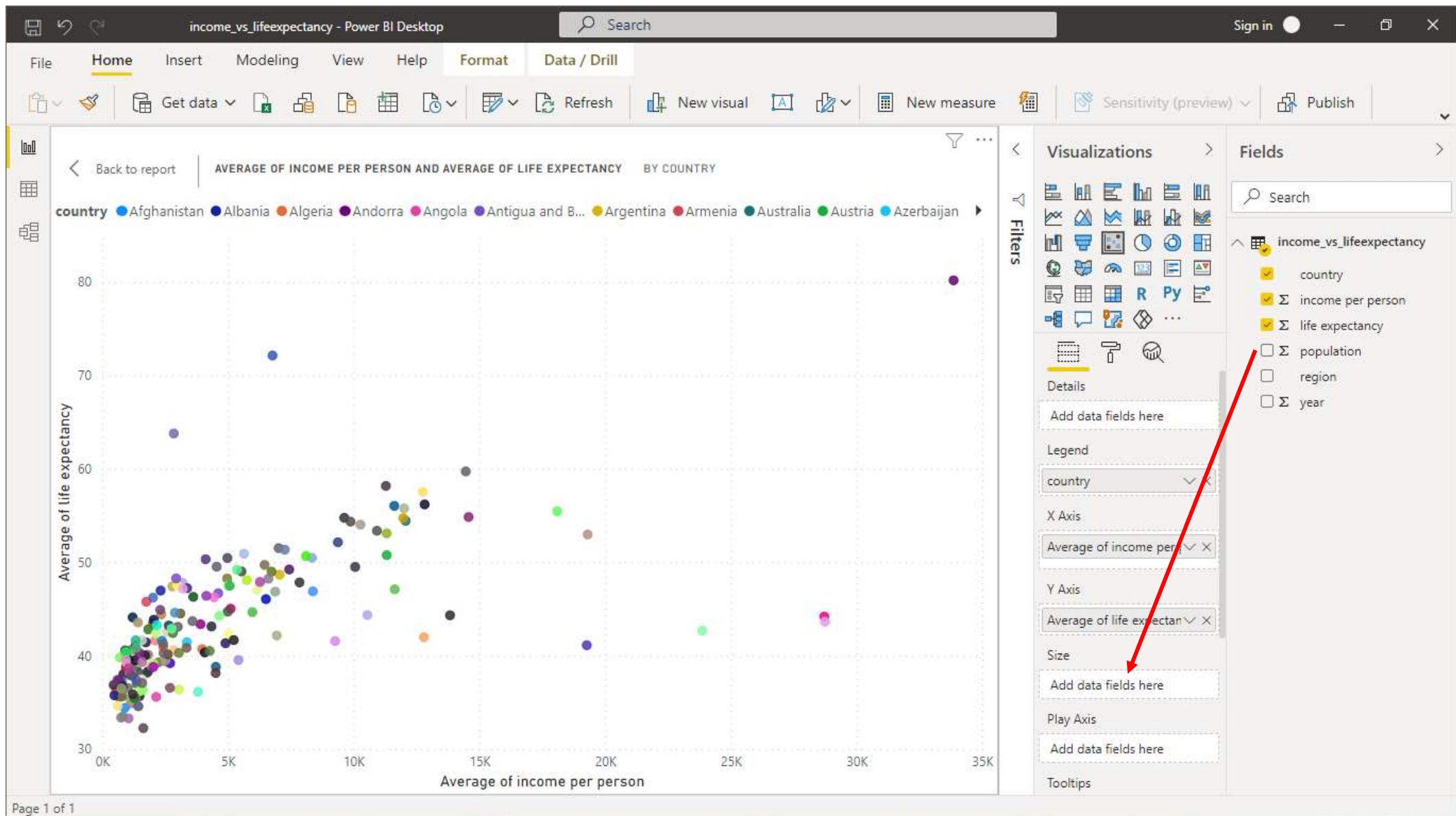
The screenshot shows the Power BI Desktop interface with the following details:

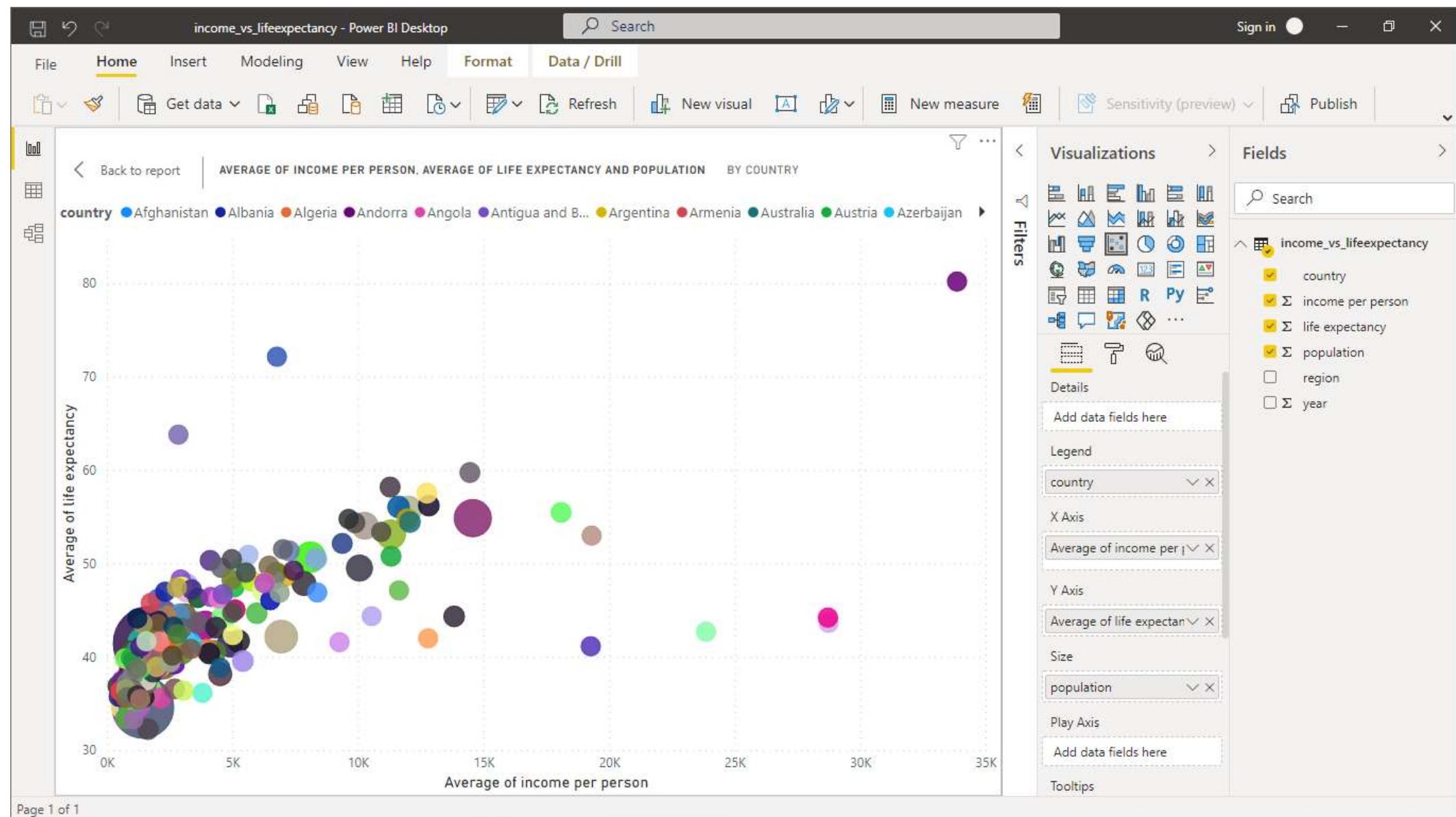
- File Bar:** Home, Insert, Modeling, View, Help, Format, Data / Drill.
- Toolbar:** Get data, Refresh, New visual, New measure, Sensitivity (preview), Publish.
- Report Area:** A scatter plot titled "AVERAGE OF INCOME PER PERSON AND AVERAGE OF LIFE EXPECTANCY". The X-axis is labeled "Average of income per person" and ranges from 4K to 6K. The Y-axis is labeled "Average of life expectancy" and ranges from 40 to 60. A single blue dot is plotted at approximately (5K, 50).
- Fields Pane:** Shows fields from the data source "income_vs_lifeexpectancy".
 - Visualizations:** Includes icons for various chart types like bar, line, pie, etc.
 - Fields:** A search bar and a list of fields:
 - country (checkbox checked)
 - Σ income per person (checkbox checked)
 - Σ life expectancy (checkbox checked)
 - Σ population (checkbox unselected)
 - region (checkbox unselected)
 - Σ year (checkbox unselected)
 - Filters:** Add data fields here.
 - Legend:** Add data fields here (highlighted with a red arrow).
 - X Axis:** Average of income per person.
 - Y Axis:** Average of life expectancy.
 - Size:** Add data fields here.
 - Play Axis:** Add data fields here.
 - Toolips:** Add data fields here.
- Page Footer:** Page 1 of 1.

Income vs Life Expectancy by Country



Size by population





Change X axis scale

The screenshot shows a Power BI Desktop interface with a bubble chart titled "AVERAGE OF INCOME PER PERSON, AVERAGE OF LIFE EXPECTANCY AND POPULATION BY COUNTRY". The Y-axis is labeled "Average of life expectancy" and ranges from 30 to 80. The X-axis is labeled "Average of income per person" and has major ticks at 1K, 10K, and 100K, indicating a logarithmic scale. The bubbles represent data points for different countries, with size and color varying by population.

The "Visualizations" pane on the right side of the ribbon contains various chart and report options. The "Fields" pane lists several measures and dimensions: country, income per person, life expectancy, population, region, and year. The "Filters" pane is open, showing settings for the X-axis:

- Search input field (highlighted with a red arrow and the number 1)
- Legend setting: Off (highlighted with a red circle)
- X axis setting: On (highlighted with a red circle)
- Scale type: Log (highlighted with a red circle)
- Start value: 200 (highlighted with a red circle)
- End value: 200000 (highlighted with a red circle)

Change Y axis range

income_vs_lifeexpectancy - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Publish Sensitivity (preview)

AVERAGE OF INCOME PER PERSON, AVERAGE OF LIFE EXPECTANCY AND POPULATION BY COUNTRY

Average of life expectancy

Average of income per person

Visualizations Fields

Filters

Y axis On

X axis On

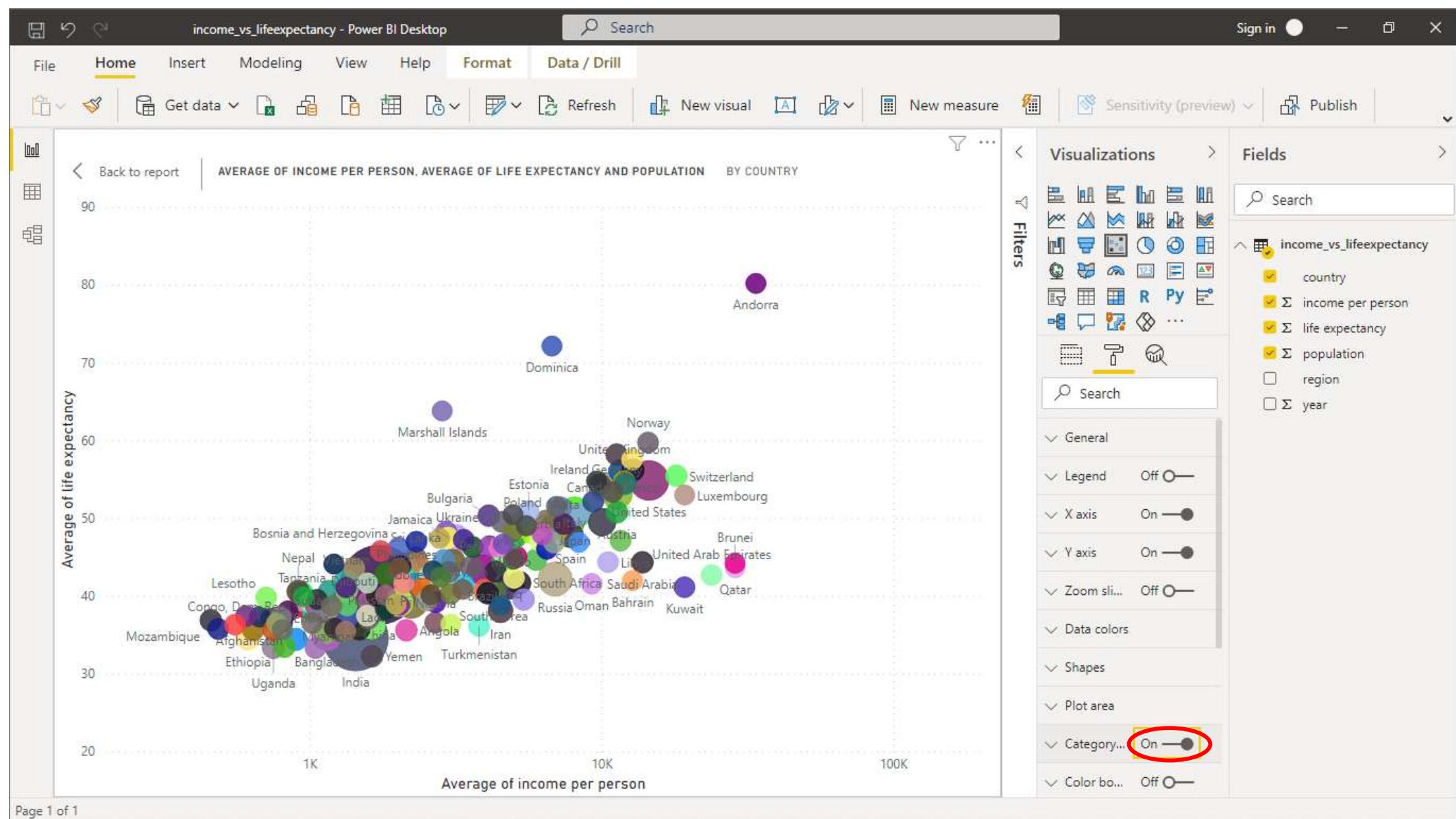
Scale type Linear

Start 20

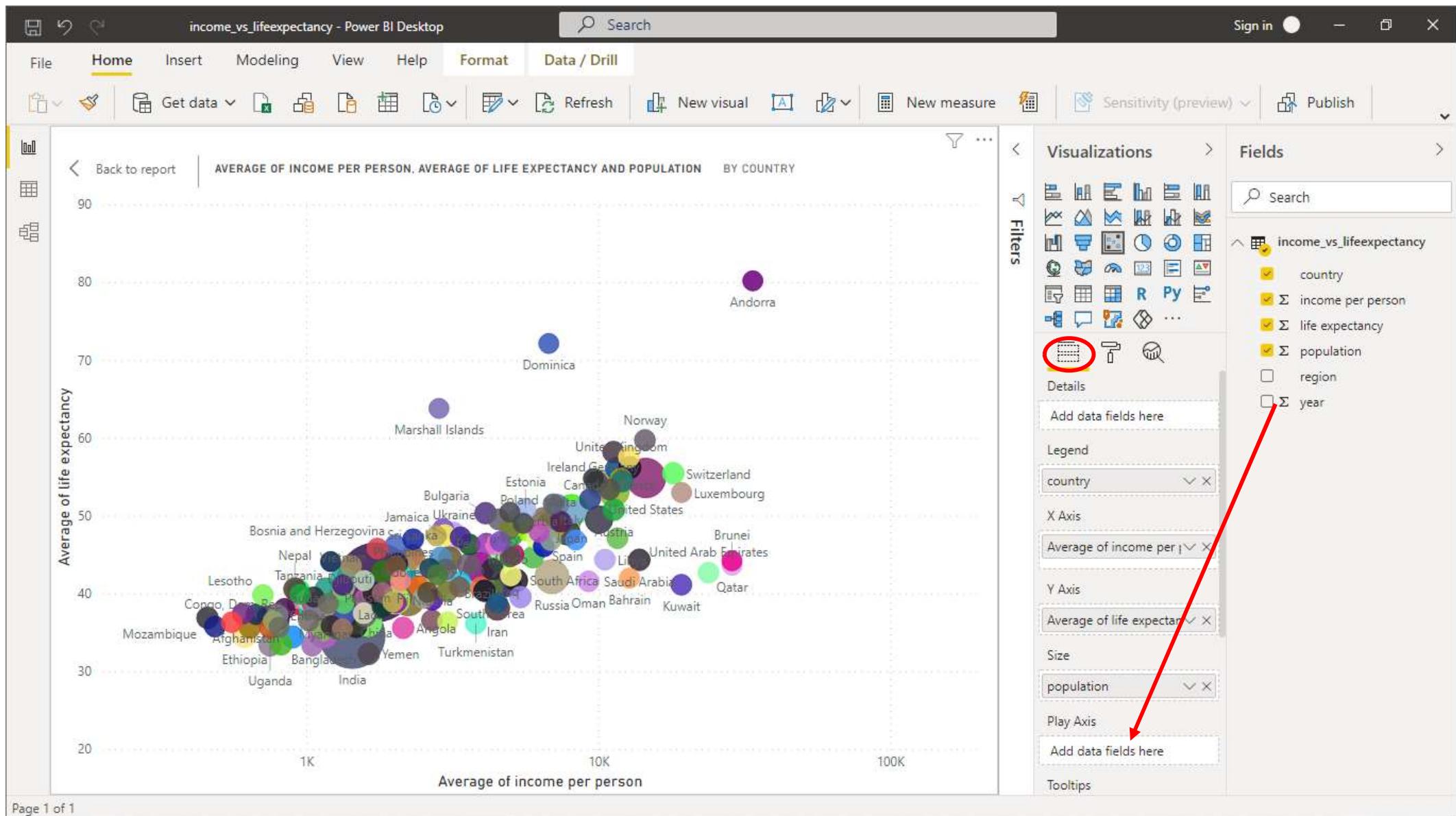
End 90

Color

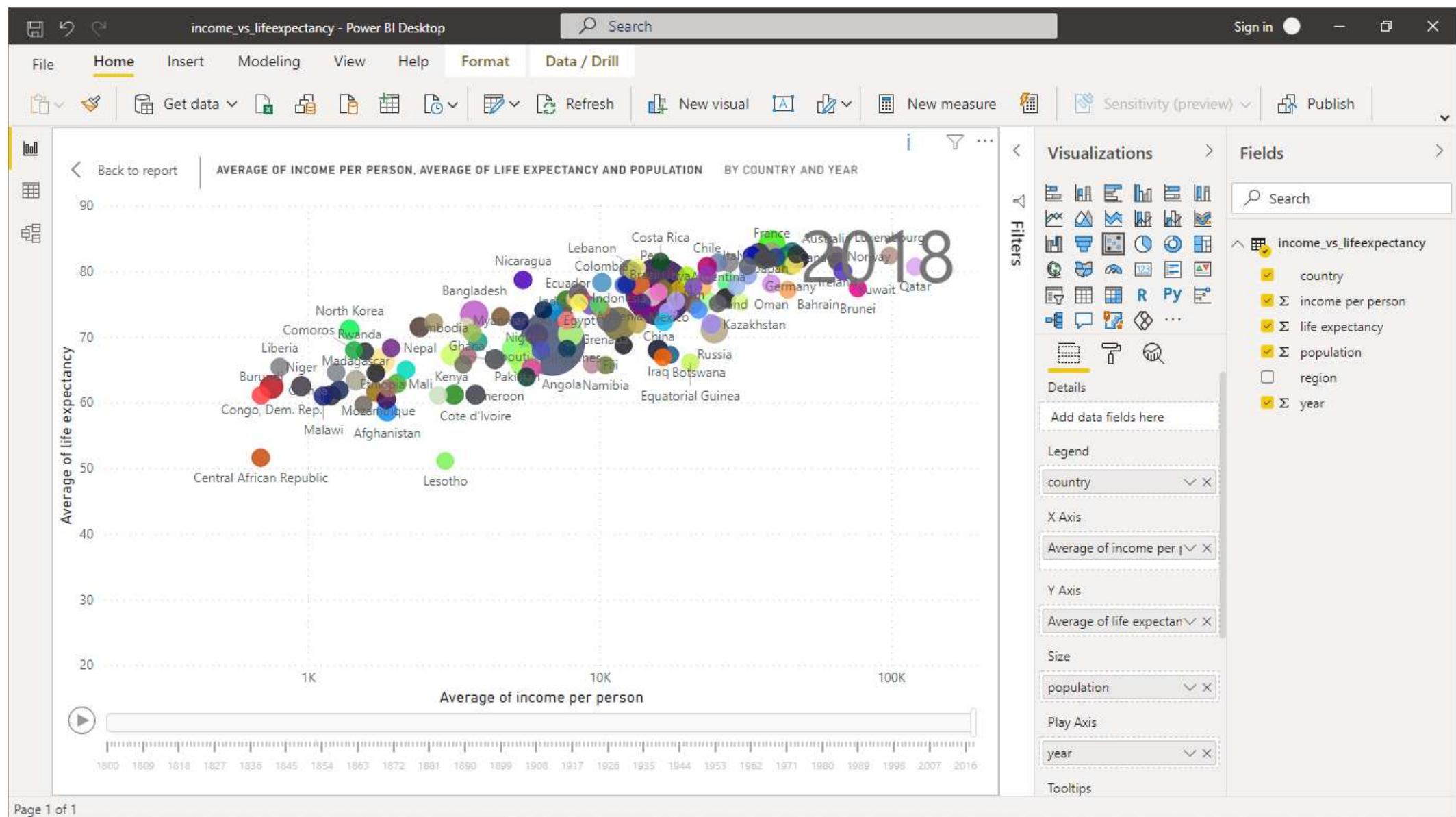
Show country names



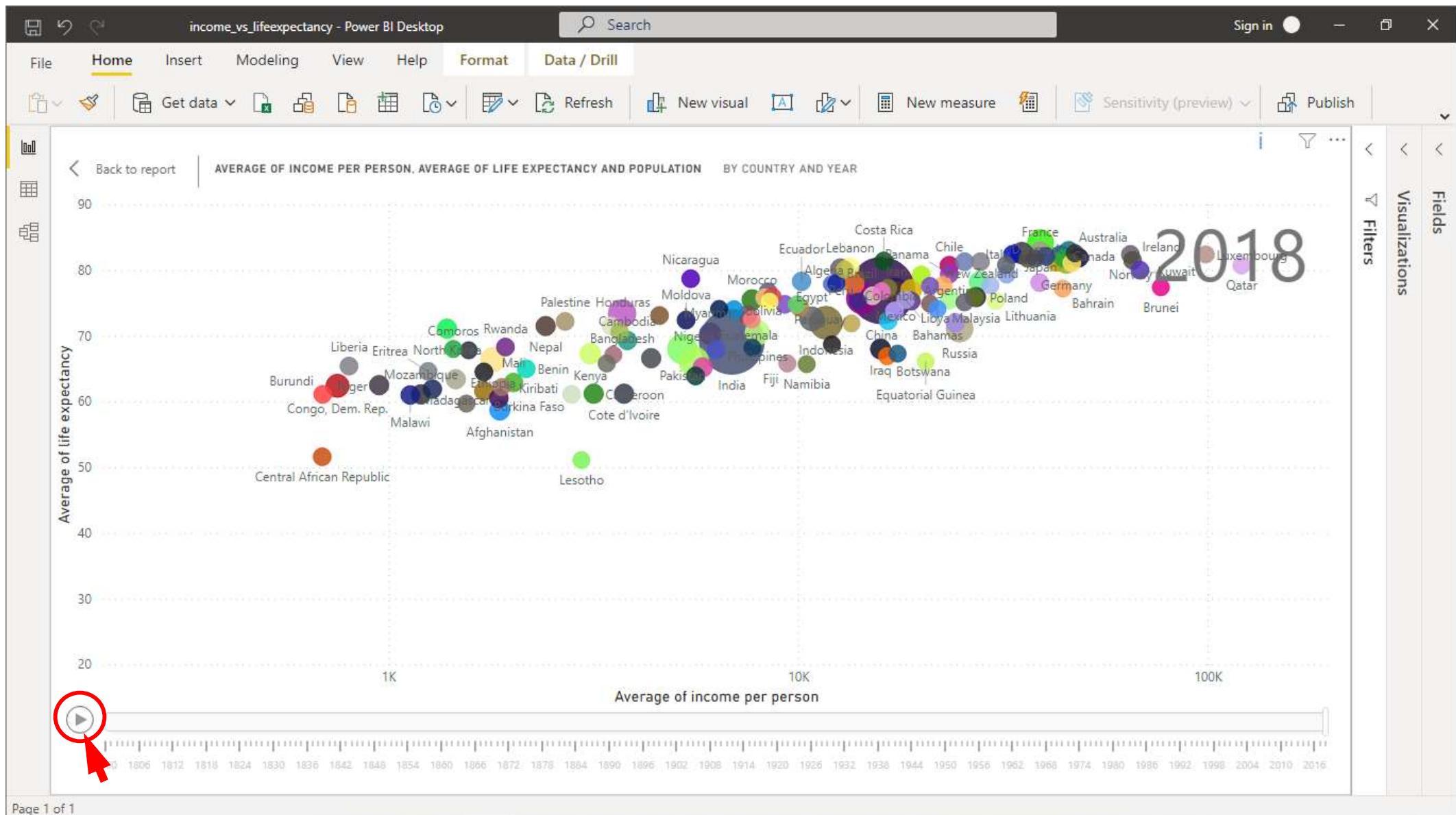
Play Axis



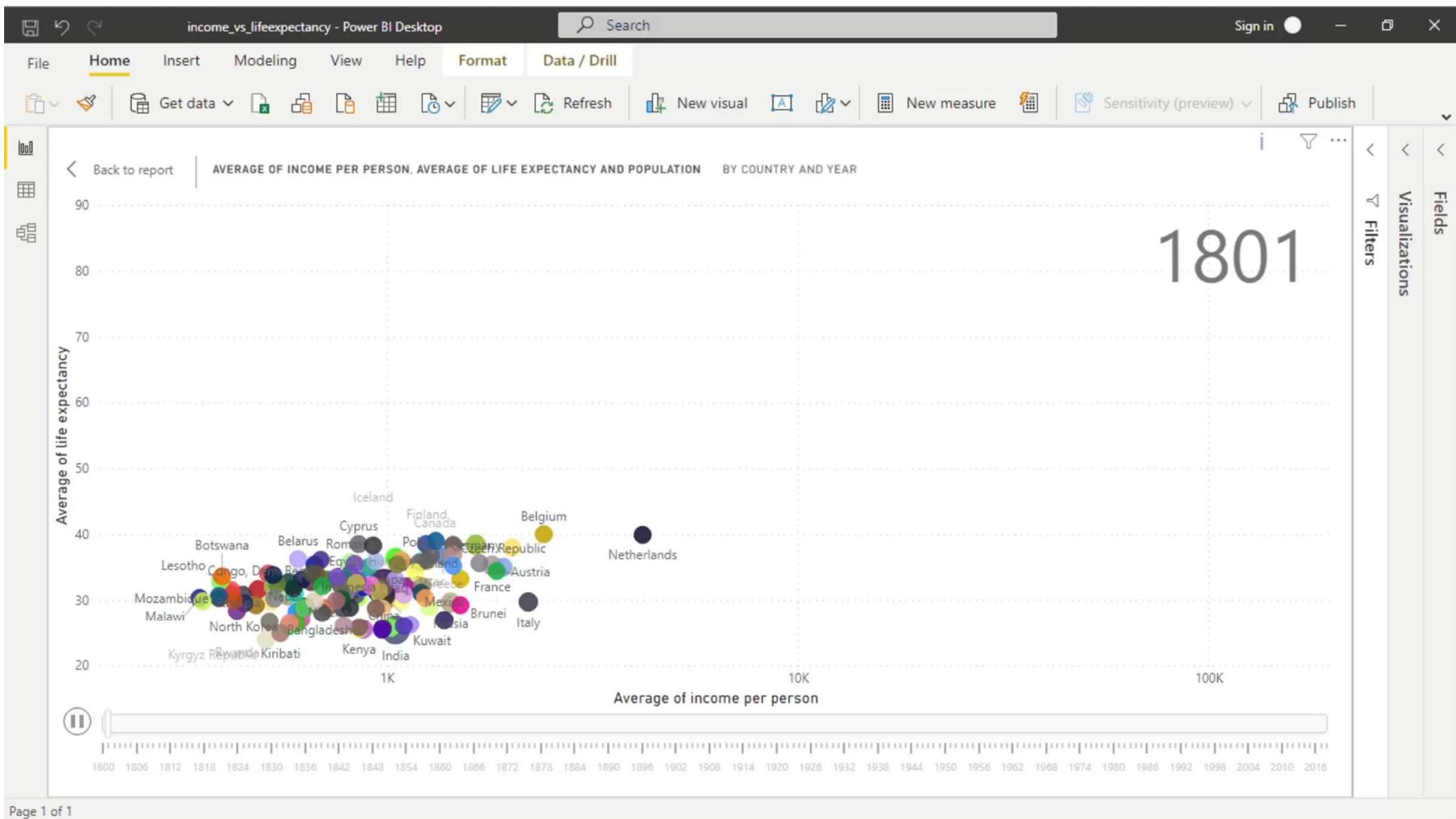
Play Axis



Play



Play



Example: Income vs Life Expectancy

For Power BI Service

For Power BI Desktop [click here](#)

Prepare an Excel File

The Excel file must be in **Table format** to work with Power BI Online.
In Excel, select a cell and do Home → Format as Table

This screenshot shows the Microsoft Excel ribbon with the 'Home' tab selected. In the 'Cells' group of the ribbon, the 'Format as Table' button is highlighted with a red circle. Below the ribbon, a table is displayed with columns labeled 'year', 'country', 'region', 'income per life exp', 'population'. The first row contains headers, and the second row contains data for Afghanistan.

| year | country | region | income per life exp | population |
|------|-----------|------------|---------------------|--------------|
| 1800 | Afghanist | asia_west | 603 | 28.2 3280000 |
| 1800 | Albania | europe_e | 667 | 35.4 410000 |
| 1800 | Algeria | africa_nor | 715 | 28.8 2500000 |
| 1800 | Angola | africa_sub | 618 | 27 1570000 |

This screenshot shows the 'Format As Table' dialog box in Microsoft Excel. The 'Where is the data for your table?' field contains the formula '=S\$1:\$F\$40438'. The 'My table has headers' checkbox is checked. The 'OK' button is highlighted with a blue border.

Format As Table

Where is the data for your table?
=S\$1:\$F\$40438

My table has headers

OK Cancel

Save file

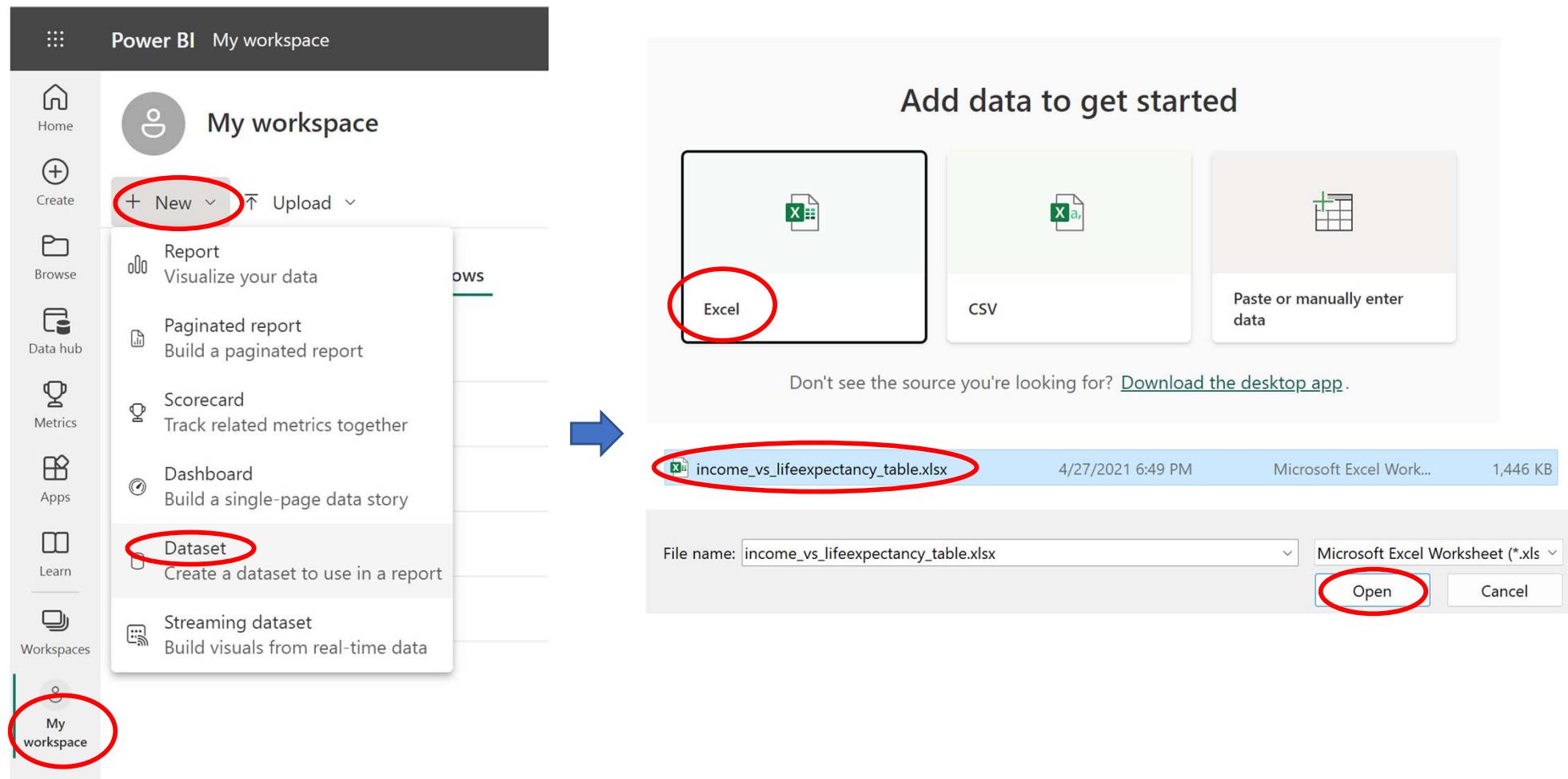
income_vs_lifeexpectancy.xlsx

Veera Muangsin VM

| year | country | region | income per person | life expectancy | population |
|------|------------|------------|-------------------|-----------------|------------|
| 1800 | Afghanista | asia_west | 603 | 28.2 | 3280000 |
| 1800 | Albania | europe_e | 667 | 35.4 | 410000 |
| 1800 | Algeria | africa_nor | 715 | 28.8 | 2500000 |
| 1800 | Angola | africa_sub | 618 | 27 | 1570000 |
| 1800 | Antigua an | america_r | 757 | 33.5 | 37000 |
| 1800 | Argentina | america_s | 1510 | 33.2 | 534000 |
| 1800 | Armenia | europe_e | 514 | 34 | 413000 |
| 1800 | Australia | east_asia | 814 | 34 | 351000 |
| 1800 | Austria | europe_w | 1850 | 34.4 | 3210000 |
| 1800 | Azerbaijan | europe_e | 775 | 29.2 | 880000 |
| 1800 | Bahamas | america_r | 1450 | 35.2 | 27400 |
| 1800 | Bahrain | asia_west | 1240 | 30.3 | 64500 |
| 1800 | Bangladesh | asia_west | 876 | 25.5 | 19200000 |
| 1800 | Barbados | america_r | 913 | 32.1 | 81700 |
| 1800 | Belarus | europe_e | 608 | 36.2 | 2360000 |
| 1800 | Belgium | europe_w | 2410 | 40 | 3140000 |
| 1800 | Belize | america_r | 579 | 26.5 | 25500 |
| 1800 | Benin | africa_sub | 597 | 31 | 637000 |
| 1800 | Bhutan | asia_west | 629 | 28.8 | 90000 |
| 1800 | Bolivia | america_s | 854 | 33 | 1100000 |
| 1800 | Bosnia and | europe_e | 669 | 35.1 | 852000 |
| 1800 | Botswana | africa_sub | 397 | 33.6 | 121000 |
| 1800 | Brazil | america_s | 1110 | 32 | 3640000 |
| 1800 | Brunei | east_asia | 1510 | 29.2 | 2130 |
| 1800 | Bulgaria | europe_e | 1090 | 35.8 | 1990000 |
| 1800 | Burkina Fa | africa_sub | 480 | 29.2 | 1670000 |
| 1800 | Burundi | africa_sub | 418 | 31.5 | 899000 |
| 1800 | Cambodia | east_asia | 903 | 35 | 2090000 |

Create Dataset from Excel file

My workspace → New → Dataset
Add data to get started → Excel



Create Report from the Dataset

The screenshot shows the Power BI workspace interface. On the left, there is a vertical sidebar with various navigation options: Home, Create, Browse, Data hub, Metrics, Apps, Deployment pipelines, Learn, and Workspaces. The 'My workspace' option at the bottom of the sidebar is circled in red. The main area is titled 'My workspace' and contains a 'New' and 'Upload' section. Below this is a filter bar with 'All' selected, followed by 'Content' and 'Datasets + dataflows'. A table lists four items:

| | Name | Type |
|--|--------------------------------|-----------|
| | covid19 | Dataset |
| | covid19.csv | Dashboard |
| | income_vs_lifeexpectancy_table | Workbook |

For the last item, 'income_vs_lifeexpectancy_table', a context menu is open, also circled in red. The menu options are: '...', 'Dataset' (which is also circled in red), 'Analyze in Excel', 'Create report' (which has a red arrow pointing to it), 'Auto-create report', 'Create operational report', and 'Delete'.

Data is ready

File ▾ View ▾ Reading view Mobile layout

Home Create Browse Data hub Metrics Apps Deployment pipelines Learn Workspaces My workspace

Build visuals with your data
Select or drag fields from the Data pane onto the report canvas.

The screenshot shows the Power BI desktop application interface. On the left is the ribbon with various navigation options like Home, Create, Browse, etc. The main area is titled "Build visuals with your data" and instructs users to "Select or drag fields from the Data pane onto the report canvas." Below this is a small icon illustrating the dragging process. To the right are three panes: "Filters" (with search and filter buttons), "Visualizations" (with a "Build visual" button and a grid of visualization icons), and "Data". The "Data" pane contains a search bar and a list of data fields under a section titled "income_vs_lifeexpect...". This list includes: country, income per pers..., life expectancy, population, region, and year. A red oval highlights this list. At the bottom of the Data pane are buttons for "Values", "Drill through", "Cross-report" (set to off), "Keep all filters" (set to on), and "Add drill-through fields here".

Filters ▾

Search

Filters on this page ...
Add data fields here

Filters on all pages ...
Add data fields here

Visualizations ▾

Build visual

income_vs_lifeexpect... ▾

- country
- Σ income per pers...
- Σ life expectancy
- Σ population
- region
- Σ year

Data ▾

Search

Add data fields here

Values

Add data fields here

Drill through

Cross-report Off

Keep all filters On

Add drill-through fields here

Create a Scatter Chart

The screenshot shows the Power BI desktop interface. On the left, the ribbon menu includes Home, Favorites, Recent, Create, Datasets, Apps, Shared with me, Learn, Workspaces, and My workspace. Under My workspace, there are three dashboards listed: Retail Analysis Sample, Retail Analysis Sample, and Retail Analysis Sample. At the bottom, there are buttons for Get data, Page 1, and a yellow plus sign.

The main area displays a scatter chart with several gray circular data points. A red circle highlights the 'Add data fields here' button at the bottom of the chart area, with a red arrow labeled '2' pointing to it.

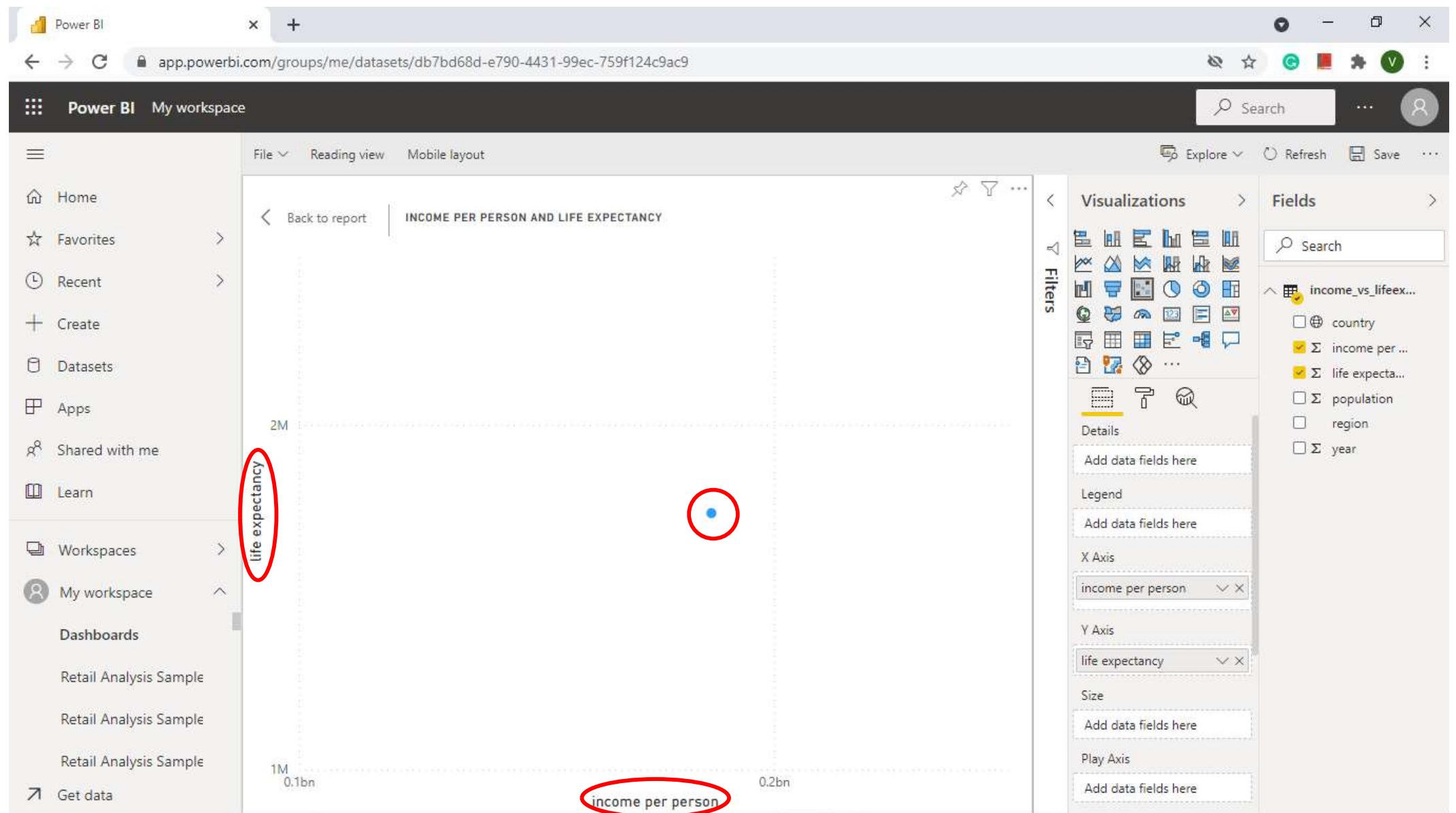
To the right of the chart is the 'Visualizations' pane, which contains various chart and report icons. One icon, a scatter plot, is highlighted with a red circle and a red arrow labeled '1' pointing to it.

The 'Fields' pane on the far right lists data fields: income_vs_lifeex..., country, income per ..., life expecta..., population, region, and year. Each field has a checkbox next to it.

The 'Visualizations' pane also includes sections for Details, Legend, X Axis, Y Axis, Size, Play Axis, and Tooltips, each with an 'Add data fields here' button.

Assign fields to X and Y Axes

The screenshot shows the Power BI desktop application interface. On the left is the ribbon menu with options like Home, Favorites, Recent, Create, Datasets, Apps, Shared with me, Learn, Workspaces, and My workspace. The main area displays a bubble chart with several gray bubbles of varying sizes scattered across a grid. Above the chart, a message says "Select or drag fields to populate this visual". To the right is the Power BI visualizations pane, which includes sections for Visualizations, Fields, Filters, and Details. Under the Details section, there are fields for Legend, X Axis, Y Axis, Size, Play Axis, and Tooltips, each with a placeholder "Add data fields here". A red arrow points from the text "Drag & Drop" to the "X Axis" field. The URL in the browser bar is app.powerbi.com/groups/me/datasets/db7bd68d-e790-4431-99ec-759f124c9ac9.



Change calculation of income

The screenshot shows a Power BI report titled "INCOME PER PERSON AND LIFE EXPECTANCY". The report contains a scatter plot with "life expectancy" on the Y-axis (ranging from 1M to 2M) and "income per person" on the X-axis (ranging from 0.1bn to 0.2bn). A single data point is plotted at approximately (0.15bn, 1.5M).

A context menu is open over the "income per person" field, specifically over the "income per person" entry in the "Visualizations" section. The menu items are:

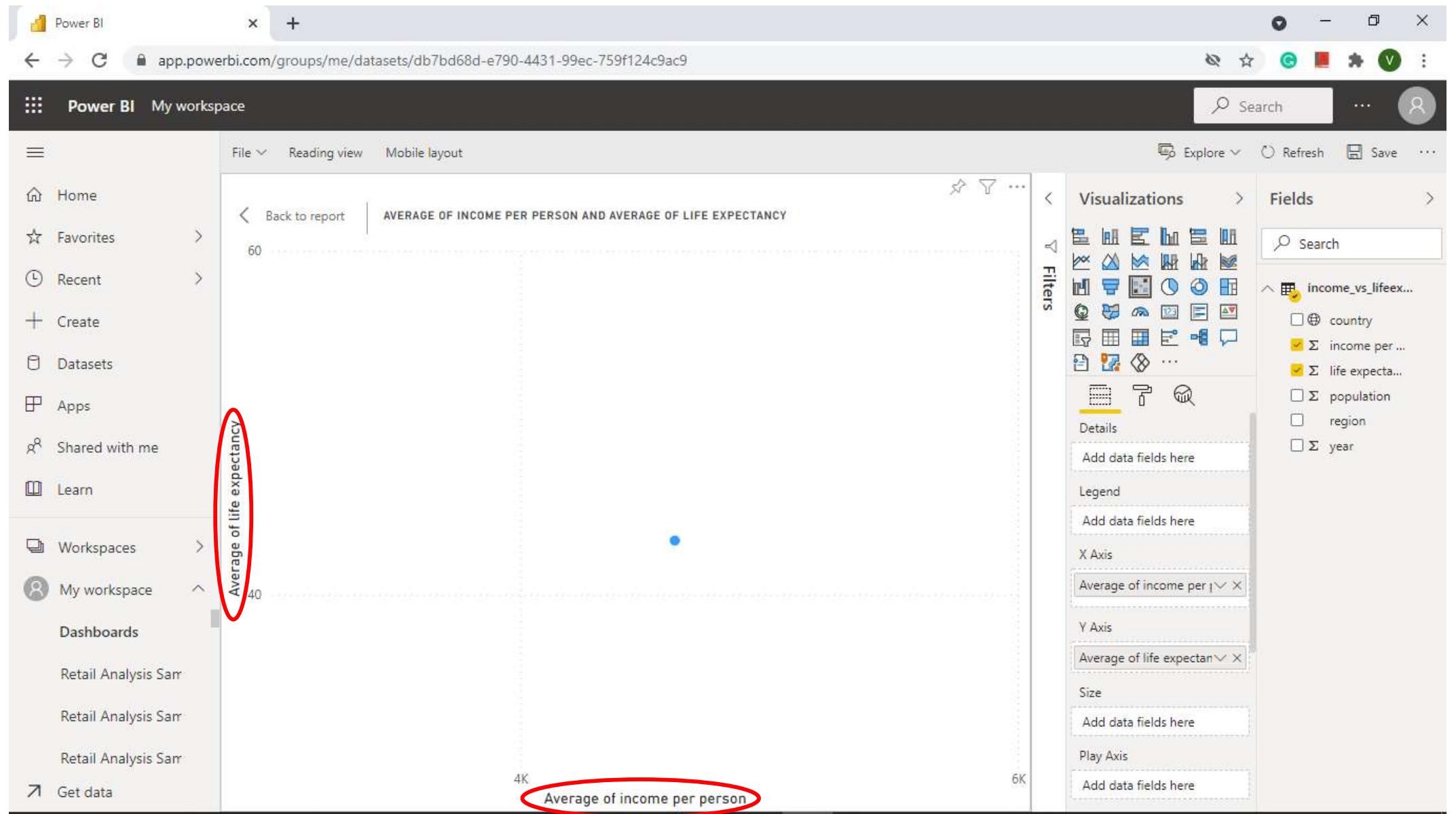
- Remove field
- Rename for this visual
- Move to
- Don't summarize
- Sum** (selected)
- Average
- Minimum
- Maximum
- Count (Distinct)
- Count
- Standard deviation
- Variance
- Median
- Show value as

Red numbers 1 and 2 are overlaid on the menu to indicate specific steps:

- 1 points to the "income per person" entry in the "Visualizations" section.
- 2 points to the "Average" option in the context menu.

Change calculation of life expectancy

The screenshot shows a Power BI report titled "AVERAGE OF INCOME PER PERSON AND LIFE EXPECTANCY". The report contains a scatter plot with "Average of income per person" on the X-axis and "life expectancy" on the Y-axis. A context menu is open over the Y-axis, specifically over the "life expectancy" field. The menu is divided into sections: "Visualizations" (containing icons for various chart types), "Fields" (containing a search bar and a list of aggregation functions), and "Filters" (containing options like "Remove field", "Rename for this visual", "Move to", and "Don't summarize"). The "Fields" section is expanded, showing a list of aggregation functions: Sum (checked), Average (selected), Minimum, Maximum, Count (Distinct), Count, Standard deviation, Variance, Median, Show value as, and Size. Red numbers 1 and 2 are overlaid on the menu: number 1 points to the "Size" option under "Fields", and number 2 points to the "Average" option under "Fields".



Use Country as Legend

The screenshot shows the Power BI desktop interface with a report titled "AVERAGE OF INCOME PER PERSON AND AVERAGE OF LIFE EXPECTANCY". The report contains a bubble chart with the X-axis labeled "Average of income per person" and the Y-axis labeled "Average of life expectancy". The chart displays a single blue bubble centered around (4K, 50). The Fields pane on the right side of the screen lists several data fields:

- income_vs_lifeex...
- country
- income per ...
- life expecta...
- population
- region
- year

A red arrow points from the text "Add data fields here" in the Legend section of the Fields pane to the legend area of the chart.

Power BI My workspace

Average of life expectancy

Average of income per person

Visualizations

Fields

income_vs_lifeex...

- country
- income per ...
- life expecta...
- population
- region
- year

Legend

Add data fields here

X Axis

Average of income per person

Y Axis

Average of life expectancy

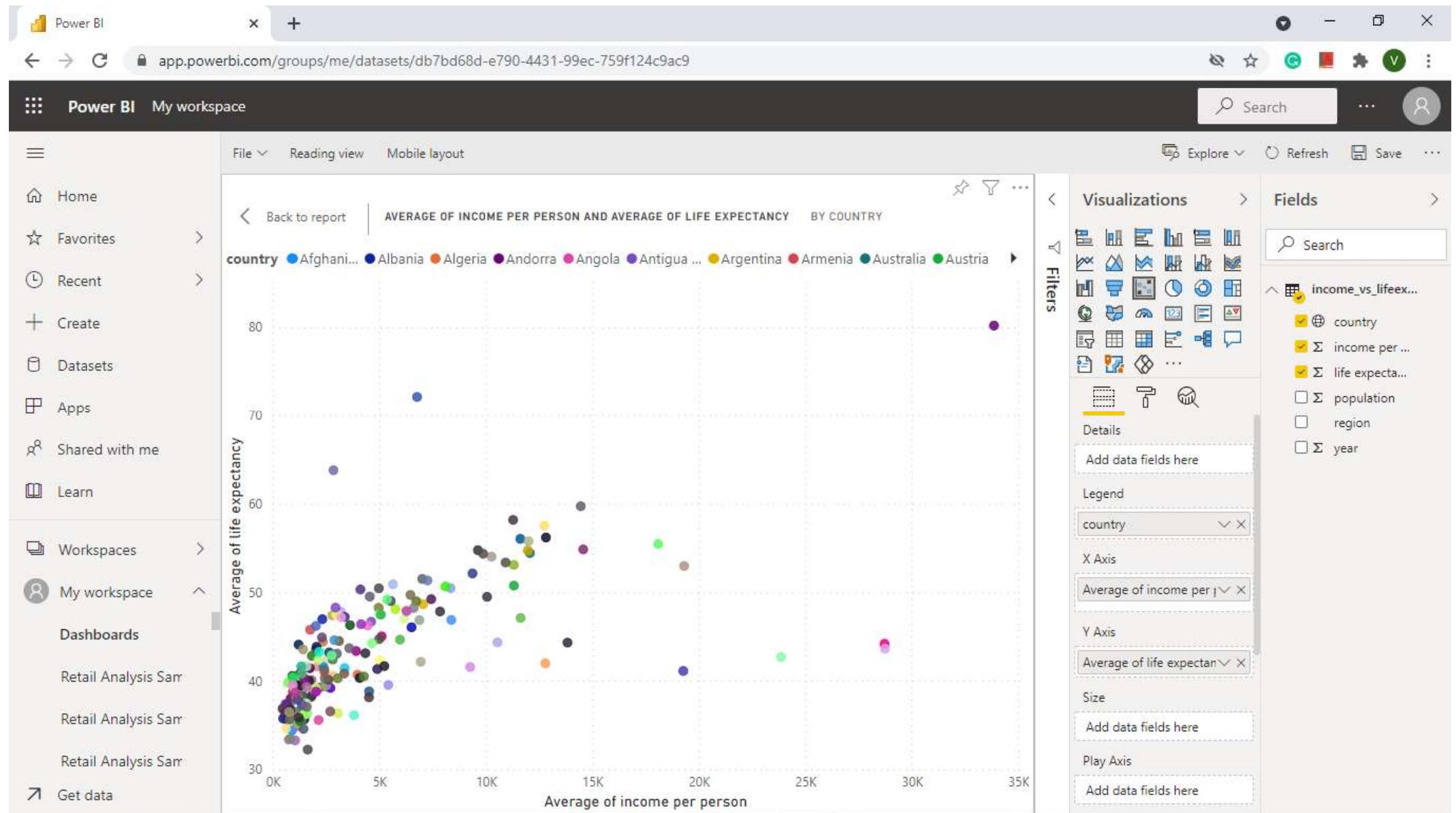
Size

Add data fields here

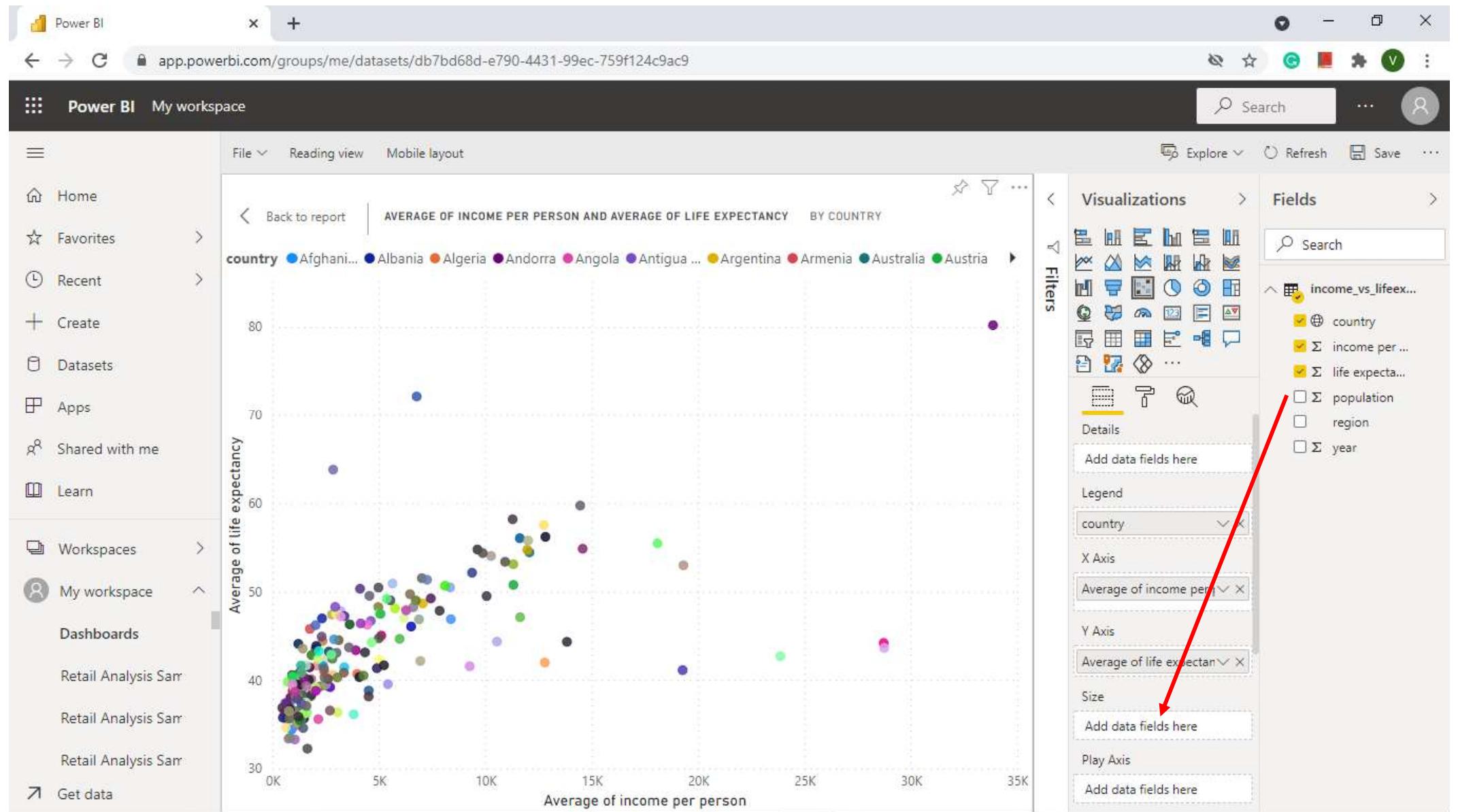
Play Axis

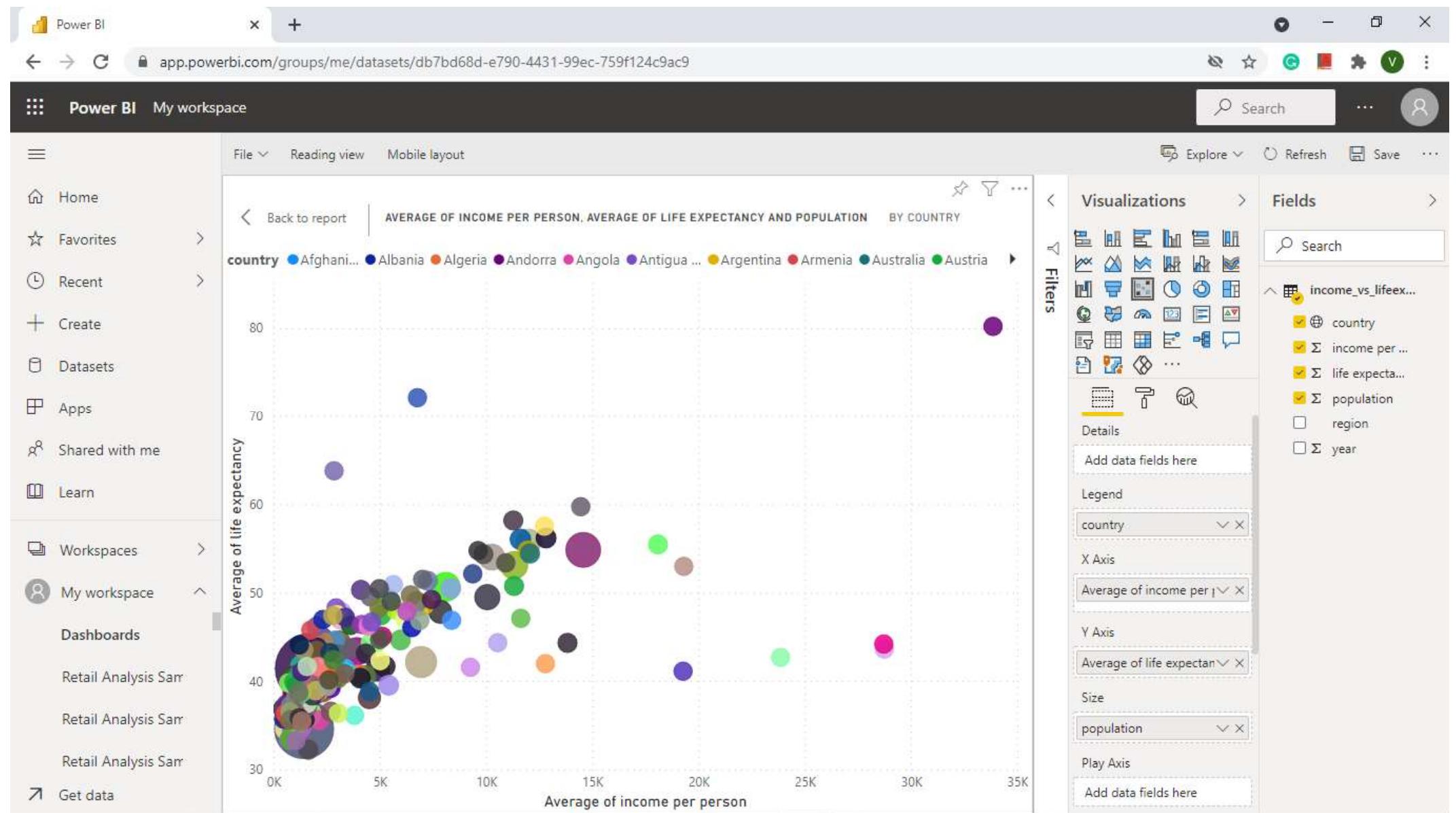
Add data fields here

Income vs Life Expectancy by Country



Size by population





Change X axis scale

The screenshot shows a Power BI report titled "AVERAGE OF INCOME PER PERSON, AVERAGE OF LIFE EXPECTANCY AND POPULATION BY COUNTRY". The main visual is a bubble chart with the Y-axis labeled "Average of life expectancy" ranging from 30 to 80, and the X-axis labeled "Average of income per person" with major ticks at 1K, 10K, and 100K. The X-axis uses a logarithmic scale. Data points are represented by colored bubbles of varying sizes. The report interface includes a left sidebar with navigation links like Home, Favorites, Recent, Create, Datasets, Apps, Shared with me, Learn, Workspaces, and My workspace. The "My workspace" section is expanded, showing three items: Retail Analysis Sam, Retail Analysis Sam, and Retail Analysis Sam. The top navigation bar shows the URL app.powerbi.com/groups/me/datasets/db7bd68d-e790-4431-99ec-759f124c9ac9. On the right side, there is a "Visualizations" pane with various chart icons, a "Fields" pane listing fields like country, income per person, life expectancy, population, region, and year, and a "Filters" pane where the "Xaxis" settings are being modified. A red circle with the number 1 highlights the "Search" input field in the Filters pane.

Average of life expectancy

Average of income per person

Visualizations

Fields

Search

1

Legend

Xaxis

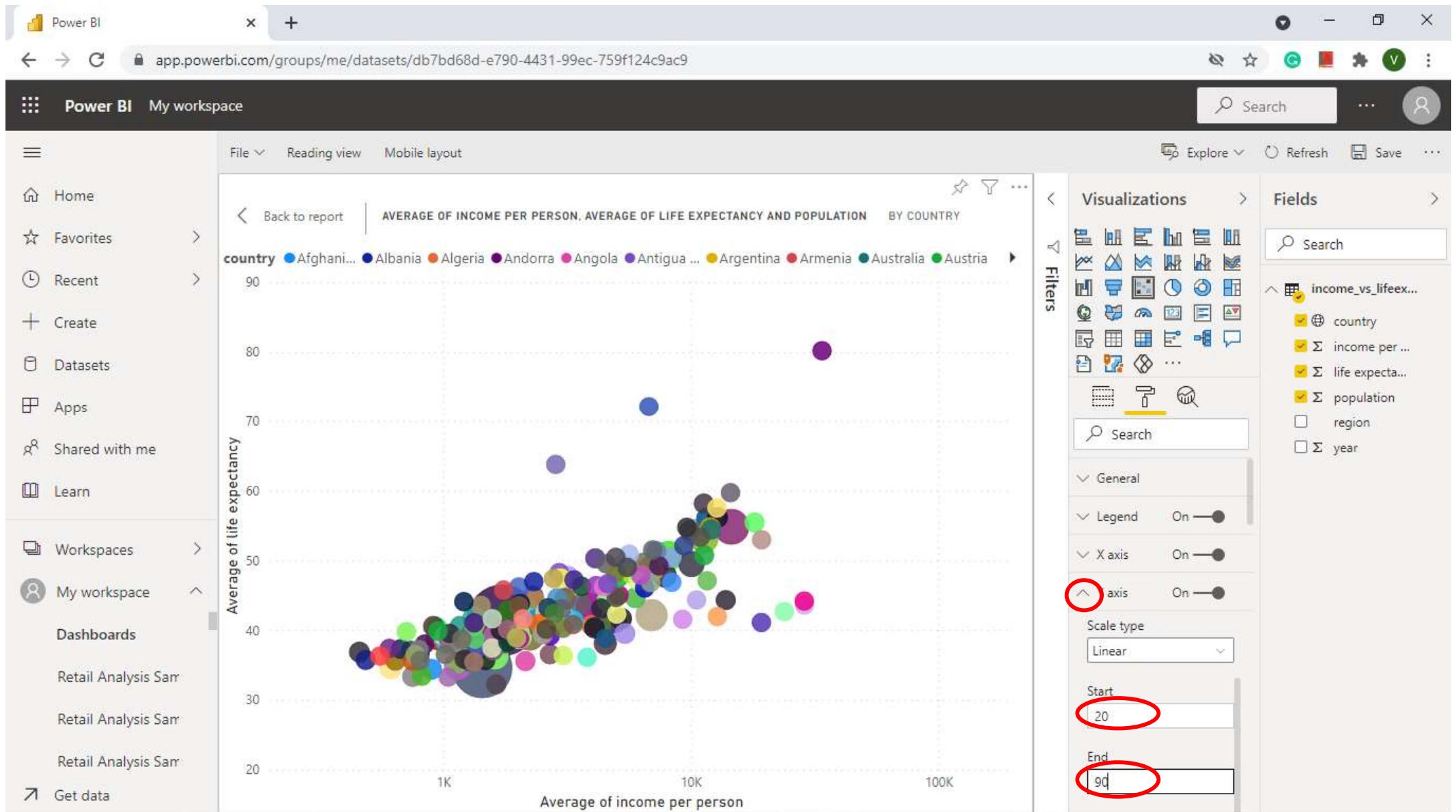
Scale type: Log

Start: 200

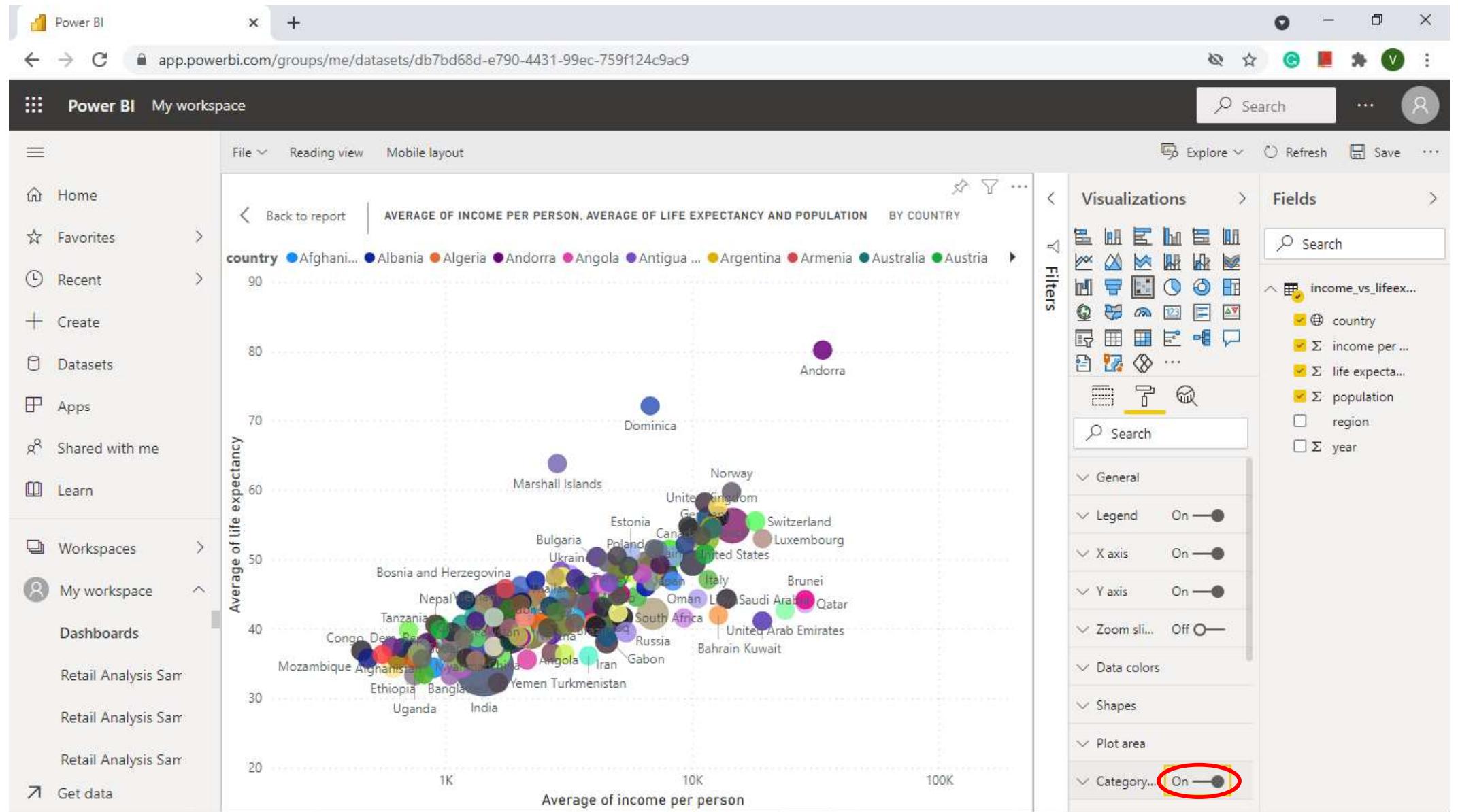
End: 200000

Invert Axis

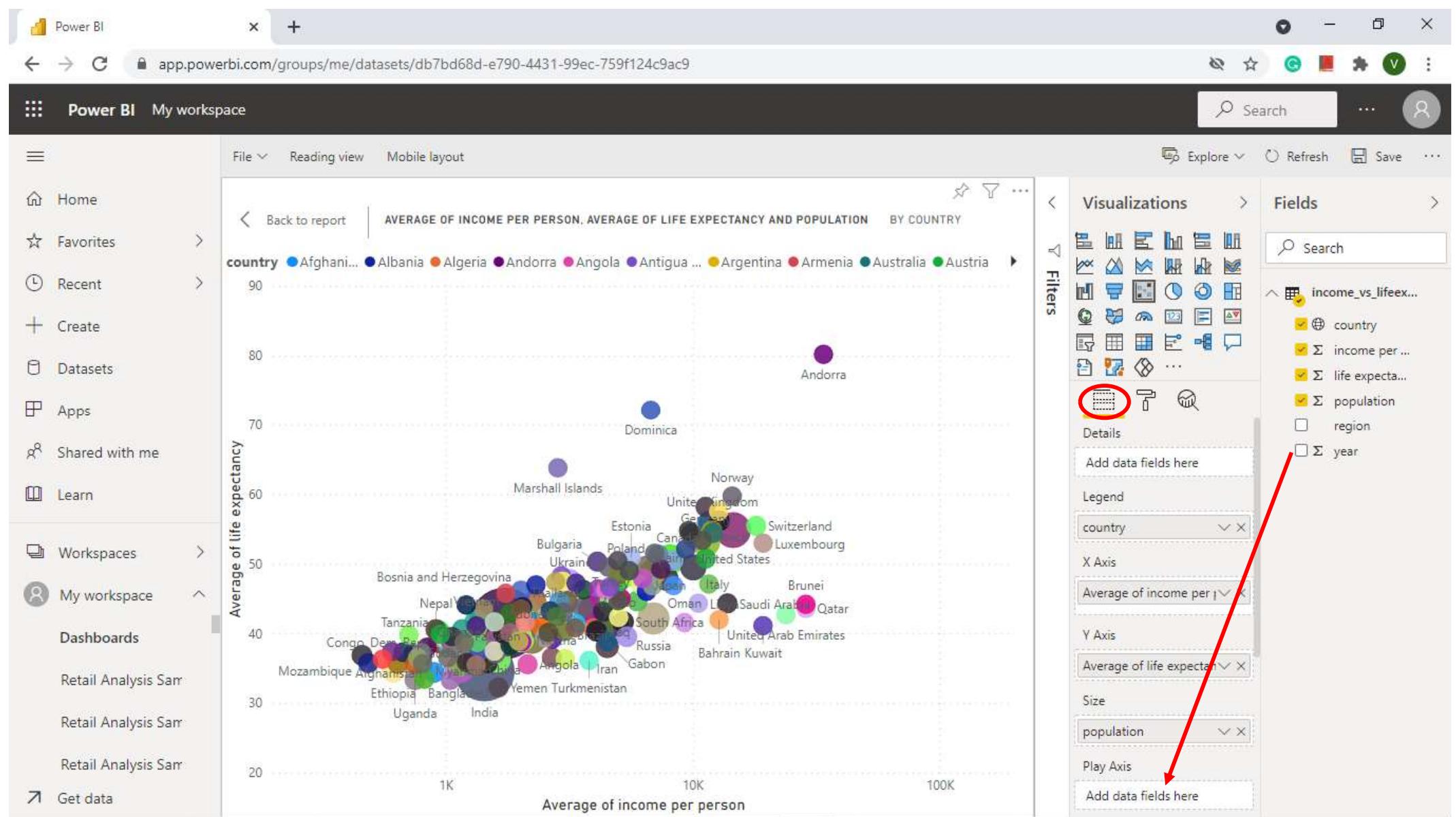
Change Y axis range



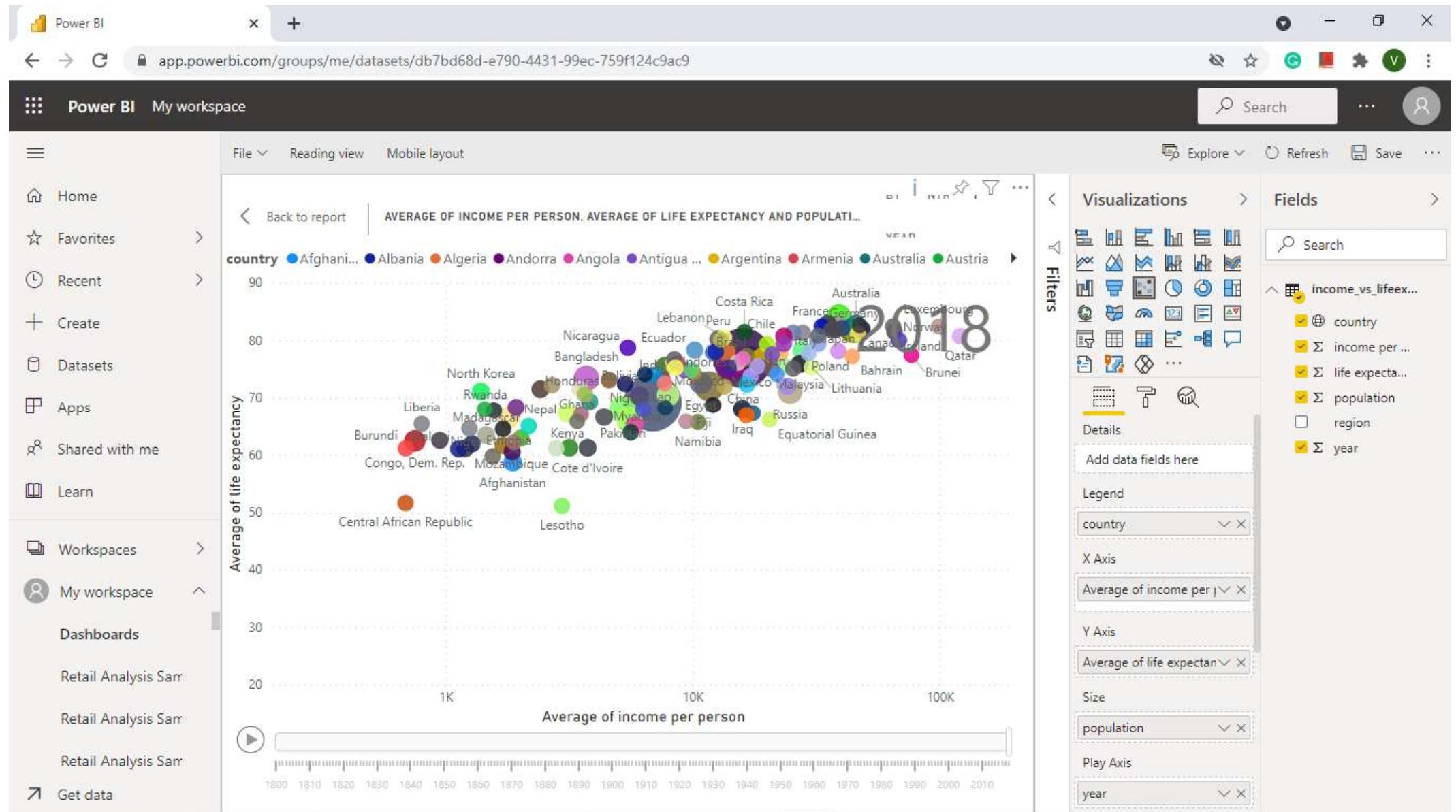
Show country names



Play Axis



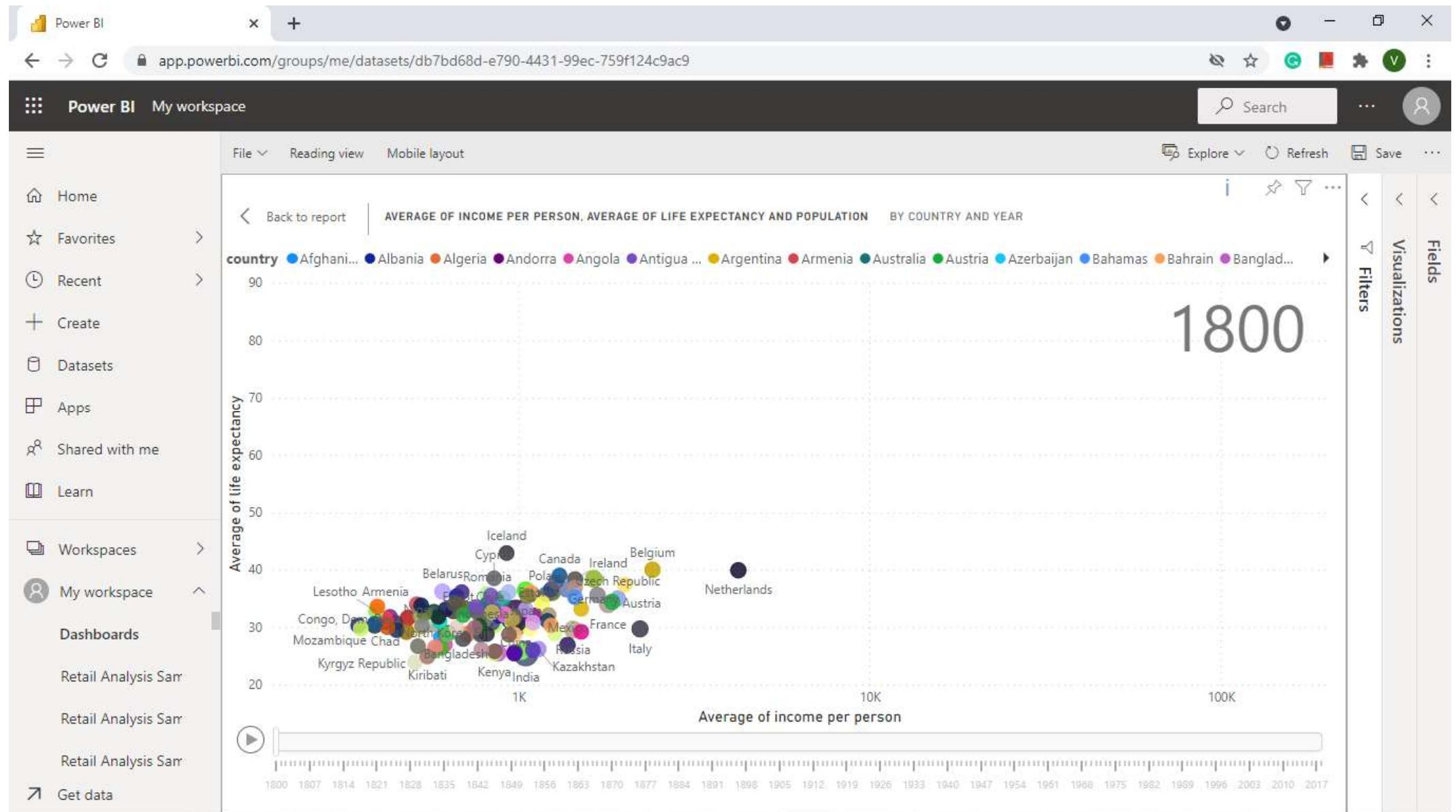
Play Axis

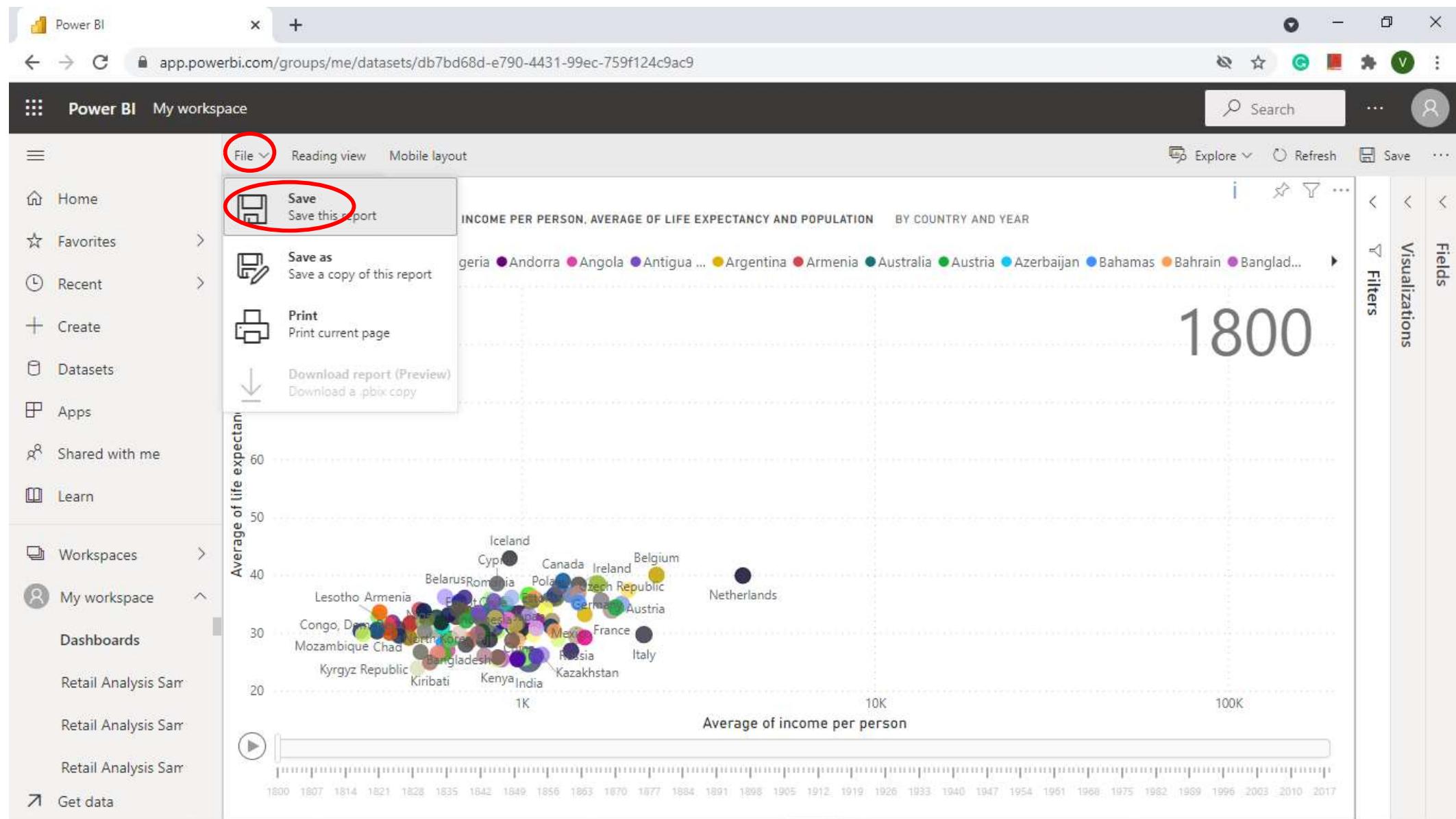


Play



Play





Power BI

app.powerbi.com/groups/me/list/dashboards

Power BI My workspace

My workspace

+ New ▾

All Content Datasets + dataflows

| | Name | Type | Owner | Refreshed | Next refresh | Endorsement |
|---|--------------------------------|---------|-------|-----------|--------------|-------------|
|  | income_vs_lifeexpectancy | Report | | | | |
|  | income_vs_lifeexpectancy_table | Dataset | | | | |

Home

Favorites

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Shared with me

Learn

Workspaces

My workspace

Dashboards

Retail Analysis Sam

Retail Analysis Sam

Retail Analysis Sam

Get data

Exercise

Covid-19 Dashboard

JHU COVID-19 Dashboard



<https://coronavirus.jhu.edu/map.html>

COVID-19 Dashboard with Power BI

covid19 - Power BI Desktop

Search

Sign in

File Home Insert Modeling View Help

Get data Refresh New visual New measure Publish Sensitivity (preview)

COVID-19 Dashboard

Global Cases
127185164

Confirmed Cases by Country

| Cases | Country/Region |
|----------|----------------|
| 30292377 | US |
| 12534688 | Brazil |
| 12038644 | India |
| 4608195 | France |
| 4489327 | Russia |
| 4847013 | United Kingdom |
| 3532057 | Italy |
| 3255324 | Spain |
| 3208175 | Turkey |
| 2784653 | Germany |
| 1862730 | Colombia |
| 1808597 | Argentina |
| 1220992 | Poland |
| 1220559 | Mexico |
| 1855874 | Iran |
| 1684568 | Ukraine |
| 1545451 | South Africa |
| 1513883 | Peru |
| 1515016 | Czechia |
| 1488085 | Indonesia |
| 1271580 | Netherlands |

Last Updated on
Sunday, March 28, 2021

Global Deaths
2783800

| US |
|----------------|
| 549335 |
| Brazil |
| 312206 |
| Mexico |
| 201623 |
| India |
| 161843 |
| United Kingdom |
| 126834 |
| Italy |
| 107933 |
| Russia |
| 96123 |

Cumulative Cases

Daily Cases

Fields

Visualizations

Filters

Page 1

Page 1 of 1

ArcGIS Map

covid19 - Power BI Desktop

Search

Sign in

File Home Insert Modeling View Help Format Data / Drill

Get data Refresh New visual New measure Publish Sensitivity (preview)

COVID-19 Dashboard

Global Cases
127185164

Confirmed Cases by Country

| Cases | Country/Region |
|-----------|----------------|
| 30262377 | US |
| 12534086 | Brazil |
| 12039643 | India |
| 4655185 | France |
| 4469327 | Russia |
| 4347013 | United Kingdom |
| 3531057 | Italy |
| 3355324 | Spain |
| 3208173 | Turkey |
| 2784651 | Germany |
| 2380278 | Colombia |
| 2308397 | Argentina |
| 2350991 | Poland |
| 2226358 | Mexico |
| 1852674 | Iran |
| 1654388 | Ukraine |
| 154545 | South Africa |
| 1529882 | Peru |
| 1515079 | Czechia |
| 1498085 | Indonesia |
| 127185164 | Netherlands |

Last Updated on
Sunday, March 28, 2021

Global Deaths
2783800

| US | |
|----------------|--------|
| 549335 | |
| Brazil | 312206 |
| Mexico | 201623 |
| India | 161843 |
| United Kingdom | 126834 |
| Italy | 107933 |
| Russia | 96123 |

Cumulative Cases

Daily Cases

Visualizations Fields

Filters

Location

Add data fields here

Latitude

Lat

Longitude

Long

Size

Cases

Color

Add data fields here

Time

Add data fields here

Tooltips

Page 1

Page 1 of 1

The dashboard displays the following key data points:

- Global Cases:** 127,185,164
- Global Deaths:** 278,3800
- Confirmed Cases by Country:** US (30,262,377), Brazil (12,534,086), India (12,039,643), France (4,655,185), Russia (4,469,327), United Kingdom (4,347,013), Italy (3,531,057), Spain (3,355,324), Turkey (3,208,173), Germany (2,784,651), Colombia (2,380,278), Argentina (2,308,397), Poland (2,350,991), Mexico (2,226,358), Iran (1,852,674), Ukraine (1,654,388), South Africa (1,545,45), Peru (1,529,882), Czechia (1,515,079), Indonesia (1,498,085), Netherlands (1,271,851,64).
- Cumulative Cases:** Shows a red line chart of cumulative cases from April 2020 to January 2021, reaching approximately 1 billion.
- Daily Cases:** Shows a yellow line chart of daily new cases from April 2020 to January 2021, with significant spikes occurring in late 2020 and early 2021.

The visualization pane on the right shows the following settings for the map:

- Location:** Latitude (Lat) and Longitude (Long) are selected.
- Size:** Cases are used as the size variable.
- Color:** Cases are used as the color variable.
- Time:** Date is selected as the time variable, with Lat and Long checked.
- Tooltips:** Add data fields here.