

# Power Query: Unpivot

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Customer	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2	Acme, inc.	1625	3866	7068	5276	4822	8421	6138	4932	6864	7780	9601	3091
3	Widget Corp	1481	1424	8957	3753	1159	6678	4639	2799	5354	8349	7218	7879
4	123 Warehousin	8704	6881	3161	4636	4011	8291	3595	7724	6106	2402	4304	6439
5	Demo Company	4118	3671	2425	9649	9152	8631	8253	3070	7745	2232	8616	4337
6	Smith and Co.	9273	9492	4711	7431	1223	6151	2442	7277	6641	9998	5727	2771



	A <sup>B</sup> <sub>C</sub> Customer	A <sup>B</sup> <sub>C</sub> Month	1 <sup>2</sup> <sub>3</sub> Revenue
1	Acme, inc.	Jan	1625
2	Acme, inc.	Feb	3866
3	Acme, inc.	Mar	7068
4	Acme, inc.	Apr	5276
5	Acme, inc.	May	4822
6	Acme, inc.	Jun	8421
7	Acme, inc.	Jul	6138
8	Acme, inc.	Aug	4932
9	Acme, inc.	Sep	6864
10	Acme, inc.	Oct	7780
11	Acme, inc.	Nov	9601
12	Acme, inc.	Dec	3091

# Power Query: Unpivot Step by Step

Bestand Home Transform Add Column View Tools Help

Group By Use First Row as Headers Count Rows

Table

Data Type: Text

1 2 Replace Values

Unpivot Columns

Unpivot Other Columns

Unpivot Only Selected Columns

Split Format

Text Column

Queries [1]

Data

1 2 3 Jan Feb

	Customer	1 <sup>2</sup> Jan	1 <sup>2</sup> Feb
1	Acme, inc.	1625	3866
2	Widget Corp	1481	1424
3	123 Warehousing	8704	6881
4	Demo Company	4118	3671
5	Smith and Co.	9273	9492
6	Foo Bars	9640	3024
7	ABC Telecom	8566	8602
8	Arsenal FC	9522	4893
9	Fake Brothers	3325	6938

	Customer	Attribute	3a	Value	3b
1	Acme, inc.	Jan		1625	
2	Acme, inc.	Feb		3866	
3	Acme, inc.	Mar		7068	
4	Acme, inc.	Apr		5276	
5	Acme, inc.	May		4822	
6	Acme, inc.	Jun		8421	
7	Acme, inc.	Jul		6138	
8	Acme, inc.	Aug		4932	
9	Acme, inc.	Sep		6864	
10	Acme, inc.	Oct		7780	
11	Acme, inc.	Nov		9601	
12	Acme, inc.	Dec		3091	

1. Select the Columns that you DON'T want to Unpivot
2. Go to the Transform Ribbon and select "Unpivot Other Column"
3. Rename the new columns

# Exercise 04A: Power Query Import from WorldPopulation.xlsx

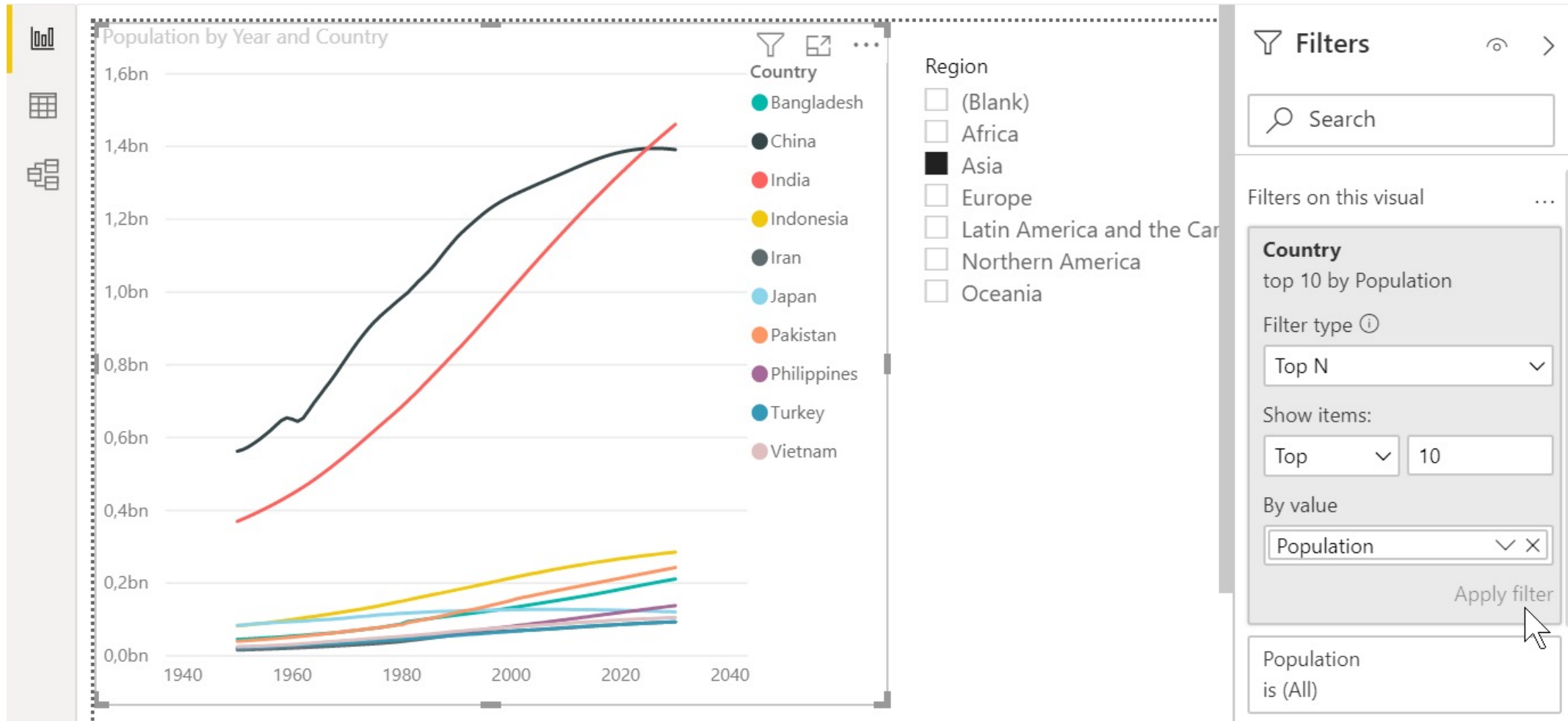
- Create query to import the population data from WorldPopulation.xlsx in tabular format:

The screenshot shows the Power Query Editor interface. On the left, the 'Queries [6]' pane lists several queries: Customers, Products, Orders, Regions, TranslationTableCountries, and Population. The 'Population' query is selected and highlighted. The main area displays a table with three columns: 'Country' (with a dropdown arrow), 'Year' (with a dropdown arrow), and 'Population' (with a dropdown arrow). The data is as follows:

	Country	Year	Population
1	Afghanistan	1950	8150368
2	Afghanistan	1951	8284473
3	Afghanistan	1952	8425333
4	Afghanistan	1953	8573217
5	Afghanistan	1954	8728408
6	Afghanistan	1955	8891209
7	Afghanistan	1956	9061938
8	Afghanistan	1957	9240934
9	Afghanistan	1958	9428556
10	Afghanistan	1959	9624606
11	Afghanistan	1960	9829450
12	Afghanistan	1961	10043473
13	Afghanistan	1962	10267083

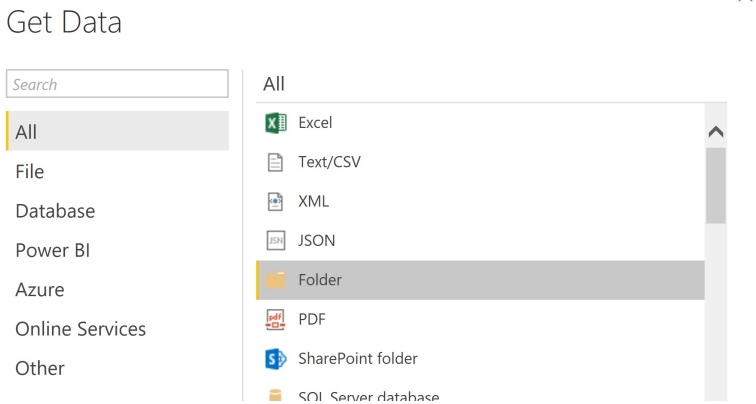
# Exercise 04B: Reports Chart of population, slicer + top 10

- Create the following chart showing the world population of the top 10 biggest countries in a region



# Power Query: Import folder 1/2 – Get Data from Folder

## 1. Get Data – More – Folder

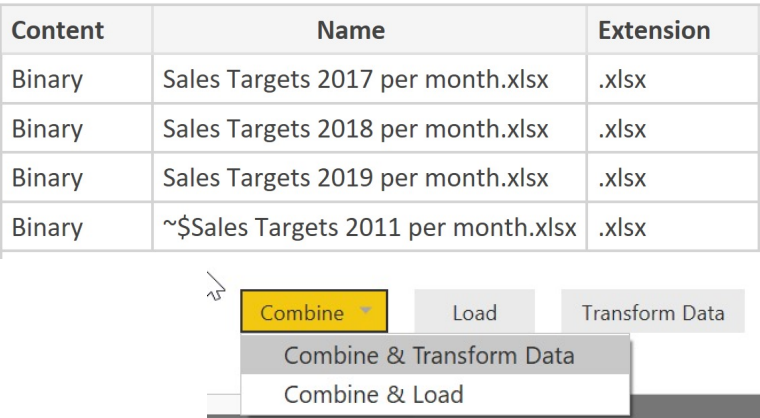


## 2. Choose a folder:



Tip, use UNC Path :  
**\\ServerX\SharenameY\FolderA\FolderB**

## 3. Select "Combine & Transform Data"

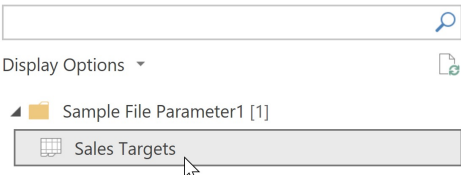


## 4. Click on the Worksheet to import

Combine Files

Select the object to be extracted from each file. [Learn more](#)

Example File: First file



Sales Targets

Sales Targets 2017	Column2	Column3
Month	Accessory	Bicycle
1	null	null
2	null	null
3	null	null
4	null	null
5	null	null

# Exercise 05A: Import Sales Targets

- Import all the Excel sheets in the "Sales Targets" folder into 1 table:

= Table.RemoveColumns("#Reordered Columns",{"Source.Name"})				
	1 <sup>2</sup> 3 Year	1 <sup>2</sup> 3 Month	A <sup>B</sup> C Category	\$ Target
1	2017	12	Accessory	10000
2	2017	12	Bicycle	200000
3	2018	1	Accessory	7000
4	2018	1	Bicycle	250000
5	2018	2	Accessory	4000
6	2018	2	Bicycle	150000
7	2018	3	Accessory	5000
8	2018	3	Bicycle	250000
9	2018	4	Accessory	7000
10	2018	4	Bicycle	250000
11	2018	5	Accessory	7000
12	2018	5	Bicycle	200000
13	2018	6	Accessory	9000
14	2018	6	Bicycle	250000
15	2018	7	Accessory	5000
16	2018	7	Bicycle	250000
17	2018	8	Accessory	7000



# Power Query: Import folder 2/2 – Change Transformation (Advanced)

5. Click on Transform Sample File from ... Query

	Sales Targets 2017	Column2	Column3
1		null	null
2	Month	Accessory	Bicycle
3		1	null
4		2	null
5		3	null
6		4	null
7		5	null
8		6	null
9		7	null
10		8	null
11		9	null
12		10	null
13		11	null
14		12	10000
15	Sum	10000	200000

6. Change the query to transform the Excel sheet as you want it to be

	Month	Category	Target
1		12 Accessory	10000
2		12 Bicycle	200000

7. Click on the end result query below

Expression.Error: The column 'Sales Targets 2017' of the table wasn't found.

Details: Sales Targets 2017

Query Settings

PROPERTIES

Name: Sales Targets

APPLIED STEPS

- Source
- Filtered Hidden Files1
- Invoke Custom Function1
- Renamed Columns1
- Removed Other Columns1
- Expanded Table Column1
- Changed Type

8 Fix the error by removing the "Changed Type" Step and do overall transformations and check all Types

	Year	Month	Category	Target
1	2017	12	Accessory	10000
2	2017	12	Bicycle	200000
3	2018	1	Accessory	7000
4	2018	1	Bicycle	250000
5	2018	2	Accessory	4000
6	2018	2	Bicycle	150000
7	2018	3	Accessory	5000
8	2018	3	Bicycle	250000
9	2018	4	Accessory	7000
10	2018	4	Bicycle	250000
11	2018	5	Accessory	7000
12	2018	5	Bicycle	200000
13	2018	6	Accessory	9000
14	2018	6	Bicycle	250000
15	2018	7	Accessory	5000

# Optional Exercise 05A2: Import Sales Targets Advanced

- Import all the Excel sheets in the "Sales Targets Advanced" folder into 1 table.

	1 <sup>2</sup> 3 Year	1 <sup>2</sup> 3 Month	A <sup>B</sup> C Category	\$ Target
1	2017	12	Accessory	10000
2	2017	12	Bicycle	200000
3	2018	1	Accessory	7000
4	2018	1	Bicycle	250000
5	2018	2	Accessory	4000
6	2018	2	Bicycle	150000
7	2018	3	Accessory	5000
8	2018	3	Bicycle	250000
9	2018	4	Accessory	7000
10	2018	4	Bicycle	250000
11	2018	5	Accessory	7000
12	2018	5	Bicycle	200000
13	2018	6	Accessory	9000
14	2018	6	Bicycle	250000
15	2018	7	Accessory	5000
16	2018	7	Bicycle	250000
17	2018	8	Accessory	7000